Clinical Remarks

ON THE

OPERATION OF THYROIDECTOMY.

Delivered at the Birmingham General Hospital, May 21st, 1885.

BY T. F. CHAVASSE, M.D., C.M., F.R.C.S. EDIN.,
SURGEON TO THE HOSPITAL.

GENTLEMEN,—For the purposes of this lecture the varieties of goitre may be considered to be—(1) Adenoid; (2) Cystic (Serous and Colloid); (3) Fibrous or Suffocative; (4) Vascular or Aneurysmal; (5) Carcinomatous.

The cystic forms are amenable to treatment by means short of excision; the malignant cannot be treated at all with hopes of success. There remains therefore the adenoid, the fibrous, and the vascular forms to be dealt with by removal. In considering the question of excision of the thyroid gland, in part or in its entirety, it is necessary that the anatomical relations of the cervical structures should be borne in mind, and especially the arrangement of the blood-vessels which supply the gland. Meyer thinks that the thyroid body receives as much blood as the forearm; and Sœmerring states that its arteries are eight times as large as those of the brain, when their respective weights are considered. In a goitrous neck that Allan Burns dissected, on the right side the superior and inferior thyroid arteries were nearly as large as the normal carotid, and on the left side the same arteries were only slightly smaller in calibre. McWhinnie, who dissected various bronchoceles, always found that the inferior thyroid artery was larger than the superior, and generally equal to the radial in calibre. In a fatal thyroidectomy of my own, the tumour being a very large one, and the patient a man aged twenty-five, the right inferior thyroid artery was the size of the first part of the axillary; both the superior arteries were as large as the radial, and the left inferior a little larger.

The operation of throidectomy is no novelty, for I find that in the year 1596 its performance was attempted by a surgeon, whose name has not been handed down to posterity, upon a girl aged ten; during the operation the patient bled to death, and the operator was imprisoned in consequence. The procedure, even in the present day, with our increased knowledge and improved armamentaria, is not one to be lightly undertaken; but certain cases of goitre call for its performance, notably those which press upon the trachea, the pneumogastric, or recurrent laryngeal nerves, causing dyspnœa, dysphagia, and loss or impairment of voice. In women, also, who are young, and in whom the tumour causes marked deformity, and the tendency of which is to increase, acute asphyxia may unexpectedly terminate existence. This fact was impressed upon me by the case of a woman, aged thirty-seven, who was under treatment in 1878 with a goitre the size of an orange, the left lobe of the gland being the part most implicated. One night she had been sitting in an arm-chair by the fire, and on awaking suddenly found her little boy walking about the room with a lighted brand. The shock was almost immediately followed by a paroxysm of dyspnœa. When I saw her two hours after the commencement of the attack she was moribund, and only breathed for a few minutes after I entered the room. The post-mortem appearances were those of death from asphyxia, and no disease of any of the viscera could be detected.

After parturition, goitres have been known to suddenly cause attacks of asphyxia. In a woman sent to me for operation last year by Dr. Edwin Bull of this town, almost immediately after giving birth to a child, a previously passive goitre caused dyspnœa. Dr. Bull also informs me that shortly before this case came under his notice, he was called one night to see a healthy, well-built, but goitrous young mother die of acute asphyxia almost before he could reach the bedside.

Exophthalmos in people affected with goitre is not necessarily a symptom to forbid operative interference. In the case of a woman, aged twenty-six, with marked exophthalmos, heart palpitation and murmurs, irregular menstruation, anæmia, dyspnœa, and dysphagia, from whom a goitre was removed successfully by Sir Joseph Lister in 1877 at the Royal Infirmary, Edinburgh, I have a note to the effect that a month after the operation the exophthalmos was less, the pulse steady, the palpitation much relieved, and the dyspnœa and dysphagia gone.

Thyroidectomy having been decided upon, the following points must be considered:—I. The question of prognosis. II. The method of operation to be followed. III. The dangers to life during and subsequent to the operation.

I. *Prognosis.*

1. With regard to age. The patient being young, the chances of a successful issue are more favourable. According to Billroth, after forty a successful termination is very doubtful.

2. The larger the tumour the greater the risk to life, this being mainly due to the increased size of the various blood-vessels. There is also a probability of its adherence to the trachea, especially if the isthmus be a broad one, or of the growth passing backwards between the windpipe and the œsophagus, thus enhancing the difficulty of applying the necessary ligatures to the pedicles. If the goitre be limited to the isthmus of the gland the operation is much simplified.

3. Substernal goitre is very unfavourable for operation, as it can only be reached with extreme difficulty. Experience has shown that the more serious the symptoms of asphyxia, so much the less are the chances of success offered by ablation.

II. *Method of Operation.*

The earliest operations were performed by cutting down upon the gland, extirpating as rapidly as possible, and staunching the hæmorrhage the best way the surgeons could. An advance upon this method was that adopted by Vogel in 1771, in which all the main arteries supplying the goitre were ligatured beforehand, and the gland removed by a circular incision. Hedenus of Dresden, who was the most successful operator at the beginning of this century, employed a median vertical incision, and the tumour was freed as far as the entrances of the thyroid arteries into the gland. A double ligature was then applied to each vessel, and a division made in the interspace. In spite of these precautions there was often great hæmorrhage. If the tumour was attached to the thyroid cartilage or upper rings of the trachea, it was transfixed with ligatures, then another was passed round the entire base and the gland removed.

In a patient upon whom Graefe successfully operated in 1820, the procedure was divided into stages. The right superior thyroid artery was first ligatured. On another occasion the right lobe of the gland was removed. The patient left the hospital, subsequently returning, when the left upper artery was ligatured, and afterwards the left lobe was successfully taken away.

The late Warren Greene, Professor of Surgery in Maine, in 1866, advocated the following method:—1. A linear incision through the integument; avoid wounding the tumour or its fascia propria. 2. Divide the fascia upon a director in the median line. 3. Reflection of the same, and enucleation of the tumour with the fingers and handle of the scalpel, paying no attention to hæmorrhage, however profuse, but going on as rapidly as possible to the base of the tumour, and compressing the thyroid arteries. 4. Transfix the pedicle from below upwards with a blunt curved needle armed with a double ligature, and tying each half, or, when practicable, dividing the pedicle into as many portions as there are main arterial trunks, and tying each half separately, and then remove the gland.

In 1871 Dr. P. H. Watson brought under the notice of the profession a mode of operating which he regarded as being rapid and nearly bloodless. For its accomplishment he laid down the following rules:—1. The external incision should be very free, extending from the larynx to the notch of the sternum if the tumour be large and spreads widely in a lateral direction; the vessels, arterial and venous, in this incision should be secured, as they are divided to avoid any obscuration of the parts through oozing. The fascia and skin should be equally opened. 2. The investing delicate fascial sheath of the thyroid gland should be left undivided until the mediate ligature of the vessels included in their fine cellular sheath has been effected. 3. Ligature of the thyroidal vessels in their sheathing cellular envelope by means of a double ligature. The cellular capsule is now

opened in the middle line and the attachments, which still retain the goitre, are divided by blunt-pointed scissors.

The advantage of this method is, that the vessels of the gland which have very frail walls are secured inside their sheath, and do not, therefore, so readily tear. On the other hand, the tendency of the ligature to slip after being secured is increased.

I would here remark that the so-called capsule of a bronchocele varies much in appearance and density; in fact, in one case operated upon by myself there was no semblance of such a texture.

Sir Joseph Lister has added to this procedure by applying additional ligatures by transfixing the pedicle in several places. By so doing the stump that is left is tied in separate bundles behind the ligature taking in the whole thickness. This plan adds somewhat to the time occupied in the performance of the operation, but the restraint of hæmorrhage is certain. Even if the main ligature should slip at one or more of the secured angles of the tumour, the pedicle being split up into so many strands by accessory ligatures, no important bleeding can occur.

In a girl, aged thirteen, with a very large goitre, operated upon by the late Professor Spence when I was his house-surgeon in the Royal Infirmary, Edinburgh, at an early period of the operation a double ligature was carefully passed under the isthmus between it and the trachea, tightly tied, and the structure divided between the two. This simplifies matters, by allowing each lobe of the gland to be taken away separately, and the trachea is less likely to be injured.

Professor Lücke of Strasburg, in his work, on "Diseases of the Thyroid Gland," advocates a median incision, and the pedicle, which is described as being rounded or plate-like, is to be ligatured *en masse* if thin; should it be thick, it is to be subdivided.

The late Professor von Bruns of Tübingen, who ranks amongst the most successful of modern operators, directs his skin incision along the anterior border of the sterno-mastoid muscle. If more space be needed, at the lower extremity of this a transverse cut is made across the neck; double ligatures are applied to the pedicles before removal.

III. *Dangers to Life during and subsequent to Operation.*

In whatever manner the thyroid gland be extirpated, the operation cannot be undertaken without numerous risks. These may be (*a*) during the operation, or (*b*) during the after progress of the case.

(*a*) Dangers during the operation:—1. "Hæmorrhage" is the first danger that needs attention. This in the earliest efforts was the most usual cause of death, and so principally feared. By securing, before the actual ablation, the isthmus and four angles of this gland this danger has been minimised. 2. "Wounding the Trachea." This is especially liable to happen when the isthmus is adherent to the rings of the windpipe, and if the attempt be made to take away the whole gland at once. Should the trachea be opened, a tube must be at once inserted. The accident is one that tells considerably against a successful issue. 3. "Injury to the large Nerve Trunks."—From the situation of the various nerves it would almost seem impossible to injure them, but cases are on record in which the accident has happened. In one of Dupuytren's, the operation having been completed, the patient had great difficulty in swallowing, rapid and difficult respiration, and constant sickness. Death took place in thirty-five hours. The post-mortem showed that the right recurrent laryngeal nerve was cut and ligatured. In another case of Klein's, during the operation the patient lost his voice and had dysphagia. In three weeks, however, the voice recovered somewhat, but ever afterwards remained a deep bass. In a patient of Billroth's who died soon after the completion of the ablation, at the autopsy it was discovered that the recurrent laryngeal nerve was included in the ligature securing the inferior thyroid artery. Injury to the recurrent laryngeal may perhaps be accounted for by the fact that, in a large bronchocele the trachea is frequently compressed and displaced. Hence the nerve in its passage to the larynx is more exposed than normal, and from its close connexion with the artery is liable to be ligatured or divided when the bloodvessel is dealt with. 4. "The entrance of air into the large veins." This is an accident extremely likely to happen, as the veins are generally much enlarged. Double ligatures should therefore always be applied before any large venous trunk is severed. In a case of Klein's, where this accident happened, the patient died immediately. In one of my own, in which the internal jugular was torn low down on the left side just as the operation was being concluded, the man succumbed in half an hour.

(*b*) Dangers during the progress of the case, the operation being concluded:—1. "Shock." A considerable degree is always present in this operation, as the procedure is a lengthy one, and a clean dissection of the anterior portion of the neck is made; but when the patient has once rallied the after-progress is often rapid and satisfactory. 2. "Secondary Hæmorrhage." This is least likely to take place when Sir J. Lister's method of securing the vessels is adopted, for then the various vessels are secured by numerous ligatures. In one of Greene's cases operated upon by his own plan, the wound was kept open until reaction was fully established, and in a quarter of an hour the inferior thyroid artery escaped from its single ligature and spurted with great violence, necessitating transfixion of the pedicle with a tenaculum, and the application of another ligature. On the tenth day bleeding again occurred, and, in spite of digital pressure, continued for seventy-two hours, but then stopped. Eventually recovery took place. 3. "Suppuration." This following ablation of the gland may prove fatal in two ways: (*a*) By implicating the surrounding cervical textures and giving rise to œdema glottidis. In a fatal case of Mr. Spence's, occurring eighteen hours after the operation, post-mortem examination showed that an œdematous condition of the glottis existed even before suppuration had commenced. (*b*) By extension into the mediastinum, causing thoracic complications. The use of antiseptics in some form or other will do much to prevent this. 4. "Necrosis of the rings of the trachea." This is only likely to arise in bronchoceles very adherent to the windpipe. In three cases in which it happened, one was due to the application of Maisonneuve's constrictor, and another to the free application of strong perchloride of iron to arrest hæmorrhage. 5. "Septicæmia and pyæmia." Antiseptics lessen these dangers. In five of Billroth's fatal cases death occurred from blood-poisoning. In a private communication my former teacher tells me that if antiseptic precautions had been used in all his cases the mortality would have been greatly lessened. 6. "Syncope." Up to the present time this, as far as I can ascertain, is an unrecognised danger. On August 14th, 1884, I removed a bilateral goitre, weighing nine ounces, from a girl, aged eighteen, with very marked symptoms. The patient rallied well from the operation, and two hours after its completion expressed herself as being comfortable. A quarter of an hour later she died suddenly in a state of collapse. The post-mortem examination showed that all the angles of the gland were securely ligatured. As far as could be ascertained after careful search the pleura was intact. However, both lungs were found to be completely collapsed. The cardiac cavities were contracted and empty. In the posterior mediastinum bubbles of air were seen; these could readily be traced down the spine into the abdomen. The subperitoneal fascia there was found to be emphysematous, and the fascia in the iliac fosse was greatly distended with air. Death was, I presume, due to syncope caused by the presence of air, which had gained access during the separation of the thyroid gland from its capsule and surrounding tissues.

My personal experience of thyroidectomy is limited to twelve cases. From these I would make the following deductions: 1. The operation is a grave one, and should not be lightly undertaken, especially as our knowledge of the exact functions of the gland are at present somewhat hazy. 2. It is better to remove one lobe at a time rather than to attempt excision of the whole gland. It is probable that such a procedure will sufficiently relieve all urgent symptoms. 3. That if a capsule exists it should be opened in the median line, and that the angles of the gland should be firmly secured before the goitre is enucleated; that it is best to first ligature the angle of the gland containing the superior thyroid artery, next the isthmus, and to take away the gland from above downwards, ligature of the inferior thyroid angle being one of the final steps of the operation. 4. That stout carbolised silk is the most reliable material for securing the pedicles. 5. That antiseptic dressings in some form should be employed. 6. That the success of the operation will probably increase with the experience of the operator.

ON the 11th inst. the managers of the Metropolitan Asylums District made their annual visit of inspection to the Leavesden Imbecile Asylum, Hertfordshire.

URIC ACID CALCULUS OF REMARKABLE SIZE REMOVED BY THE HIGH OPERATION.

BY SIR HENRY THOMPSON, F.R.C.S.,

SURGEON EXTRAORDINARY TO HIS MAJESTY THE KING OF THE BELGIANS, LATE PROFESSOR OF SURGERY AND PATHOLOGY TO THE ROYAL COLLEGE OF SURGEONS OF ENGLAND, CONSULTING SURGEON TO UNIVERSITY COLLEGE HOSPITAL, EMERITUS PROFESSOR OF CLINICAL SURGERY, ETC.

I HAVE recently performed the high operation for stone in the bladder after the manner of Petersen in four cases, and propose to give a *résumé* of the results, calling attention at the same time to a modification of the proceeding which I have adopted, and venture to believe with considerable advantage. The first case has already been reported in THE LANCET of October 11th, 1884: a man aged thirty-six years, from whom I removed a cystic oxide calculus weighing nearly three ounces, and who is now in excellent health, and is pursuing an active occupation. The third case is the subject of the present communication, being one of exceptional interest and importance. The second and fourth cases will be given in a succeeding paper, together with general remarks on the whole. All four patients have recovered, and are now in good health, the last two cases not being quite completed owing to the recent dates of operation.

W. H——, aged sixty-two, a man of large and apparently powerful frame, from whose indistinct recollection it may be inferred that symptoms of calculus in the bladder had been experienced from fifteen to twenty years. For the past eleven years he has been unable to work (he is a small farmer), and during the last seven years he has passed his time chiefly in bed and on the sofa, almost entirely within doors, unable, as he said, to make up his mind to undergo an operation.

On April 28th last I saw him for the first time, being sent to me by Mr. Atkinson, of Benington, Boston, Lincolnshire, for consultation. I sounded him, finding a stone of large size; I advised him at once to submit to lithotomy, and determined on the high operation, as above stated.

On the following day, April 29th, Mr. Moss gave ether, Mr. Buckston Browne chiefly assisting me, with the aid of Dr. Hickman of Dorset-square, and Professor Rockwood of Colombo. The pear-shaped indiarubber bag[1] was first introduced into the rectum, and then distended with twelve or thirteen ounces of water. A catheter was introduced into the bladder and nearly the same quantity injected there. The penis was firmly tied with a vulcanised catheter to prevent the fluid escaping, there being, of course, no staff. The position of the bladder above the pubes was now very distinctly visible, and could also be defined by palpation and percussion; it resembled a small gravid uterus. I made an incision of the skin and fatty tissue from the symphysis pubis upwards by transfixion, about four inches long, dissecting with the aid of a director down to the linea alba; no vessel requiring attention was met with. Arrived at the linea alba, I notched it, and incised it upwards and downwards on a director, the total extent being about three inches. I then divided its connexion with the symphysis pubis on each side laterally for about a third of an inch, as well as the attachments of the recti, and separated the latter with my finger.

At this point I desire to call attention to the mode of procedure which I adopted at this stage of the operation. Hitherto it has been the custom to divide the tissues beneath the linea alba chiefly by means of the scalpel with the aid of a director; and in doing so some large veins, often troublesome, may be and are thus wounded. Professor Guyon, of Paris, who has published some very interesting records and remarks on Petersen's operation,[2] dwells at length on the great inconvenience caused by bleeding veins, and the obscurity occasioned by the constant filling of the wound with blood from this source. I adopted the following course:—Laying aside the knife, I proceeded slowly with the nail of the right index finger, which, having tried the probe and forceps in previous cases, I greatly prefer for the purpose of scratching through the tissues in the direction from the symphysis upwards, using the left in a similar way but downwards rather behind the symphysis, drawing at the same time any vein met with out of the way, an exceedingly easy matter, so that not one was injured. The scratching action, if I may so term it, of the right index finger has the effect also of drawing upwards the peritoneum, if it lies in the line of the wound (I think, however, in this case it did not). In less than three minutes I found, somewhat to my surprise, that I had already reached and laid bare the circular fibres of the bladder without any embarrassment from hæmorrhage, and having had no occasion to tie or twist a single vessel. The sense of fluctuation from the bladder beneath the finger was now so distinct that I had merely to insert a small curved hook; holding this in my left hand, I resumed the scalpel, but solely for the purpose of puncturing the bladder sufficiently to allow my index finger to enter, which stopped the outflow of water as it passed and came into contact at once with a large stone underneath. I now insinuated the other index finger and gradually enlarged the opening, solely by finger distension,

until I made room for the use of a large lithotomy forceps. By means of this, after two or three attempts, I acquired a firm hold on the longitudinal axis of the stone and removed it without much trouble. There was no hæmorrhage to speak of, and no means were required in regard to it.

The indiarubber rectal bag and the ligature from the penis being removed, he was placed in bed on his back. No tube or catheter was introduced, and the urine drained off freely from the wound. There was very little fever, and after two days the patient was placed alternately for six hours at a time on either side, so as to provide for the outflow of urine with as little excoriation of the skin as possible.

May 20th.—He is slowly acquiring strength; the pulse is about 90; the temperature is at times a degree and a half above the normal standard. He is prone to slight diarrhœa; but he is, on the whole, improving.

June 4th.—Walks about his room. Passes four ounces of urine daily by the urethra.

14th.—He is desirous to leave town and have the advan-

[1] Described and engraved in THE LANCET of October, 11th, 1884.

[2] Annales des Maladies des Organes Génito-Urinaires, vol. i., parts 1 and 2. (Paris, Baillière, 1883.)

tage of country air. One-third of the urine passes by the urethra, the rest by the suprapubic opening. His health is excellent; he takes a daily walk, and as the healing process of so large a wound, greatly as it has already diminished in size, will probably progress better at home than in London, no objection is made to his return there.

July 14th.—He writes me that "almost all the water passes by the proper channel"; the wound, nearly healed, "would only just admit a cedar pencil"; that he is "in capital health, and walks two miles or more every day."

In the woodcut in the preceding page the calculus is represented of the natural size. It measures 4½ in. in length by fully 3 in. in breadth; the major circumference being almost 12 in., the minor 8 in. The weight is 14 oz. avoirdupois. There is a remarkable natural denudation of the layers of the calculus on each side, corresponding with the orifices of the ureters in the bladder. The entering currents of urine through these canals have clearly worn away the stone to a considerable extent.

The chief examples of calculi of remarkable size on record for which an operation has been undertaken in this country are given in the above table.

The largest calculus of uric acid which I have ever met with is one in St. Thomas's Hospital museum. It was removed by autopsy from the bladder of Sir Thomas Adams, who died in 1672; it is said to weigh 25 oz. It was described, with many interesting particulars relating to its history, by Mr. Charles Williams of Norwich, in the Path. Trans., vol. xxi. (1870), pages 267-270. Mr. Williams has been so good as to send me a report on the large calculi in the Norwich Museum. The first in the accompanying table (Harmer's) is the only one of extraordinary size there. The next in order weighs 8 oz.; but while this is remarkable, it belongs to a more numerous class than that now under consideration.

TABLE OF CALCULI OF REMARKABLE SIZE REMOVED BY OPERATION IN ENGLAND.

Sex.	Age.	Nature of operation.	Operator.	Date.	Weight.	Result.	Source of record.
Male	48	"Marian operation." Extracted entire.	Harmer, of Norwich.	1746	"Nearly 15 oz." "Alternating layers."	Lived five years, the wound remaining open.	Gooch's Cases and Remarks on Surgery, p. 54. (London, 1758.) Now in the Norwich Museum.
,,	—	Lateral operation Extracted entire.	Cheselden, of St. Thomas's Hospital.	The end of last century	17 oz., consisting of three uric acid calculi united by phosphatic matter.	Death next day.	Catalogue of Calculi in the Museum, Royal College of Surgeons. A. c. 7, page 37, plate 3.
,,	28	Lateral operation. Extracted in fragments.	Mayo, of Winchester.	1818	14 oz. 2 dr.	Recovered.	Paper in Medico-Chirurgical Transactions, vol. xi., p. 54. (1821.)
,,	43	Lateral operation. Failed to remove.	Dalrymple, of Norwich.	1818	About 13 oz. at autopsy.	Death.	Earle's Paper in Medico-Chirurgical Transactions, vol. xi., p. 71. (1821.)
,,	43	Lateral operation. Extracted entire.	Astley Cooper, of Guy's Hospital.	No date.	16 oz.	Death four hours after.	Ibid., p. 73.

Phosphatic calculi of large size are far more common, and they sometimes attain a greater weight than any of the above-mentioned examples. In the well-known case of Sir Walter Ogilvie, the phosphatic mass, which Mr. Cline endeavoured to remove without success, was found at the autopsy to weigh 46 oz. troy, and was quite immovable by any operation practicable during life. It is in the collection of calculi at the museum of the Royal College of Surgeons, No. H 2; Cat. Calc., part i., p. 116.

(To be concluded.)

ON THE

OCCURRENCE OF BLOOD IN THE URINE IN GRANULAR KIDNEY.

BY SAMUEL WEST M.D., F.R.C.P.,

PHYSICIAN TO THE ROYAL FREE HOSPITAL, AND TO THE CHEST HOSPITAL, VICTORIA PARK; MEDICAL REGISTRAR AND TUTOR AT ST. BARTHOLOMEW'S HOSPITAL.

BLOOD in the urine in granular kidney is not, I believe, of very common occurrence, and may on that account lead to difficulties of diagnosis. It may be in sufficient quantity to give the urine a bright-red colour, or, as is less rare, a smoky or pinkish hue. The following cases have recently come under my observation.

CASE 1.—A girl, aged twenty-one, came into the hospital with a history of fits for two years, attended with attacks of biliousness, giddiness, and sickness. She had suffered from childhood with a chronic discharge from the ear, and her hearing was considerably impaired. For the last few weeks she had to rise several times in the night to pass urine. On the evening of her admission she had one of the so-called fits. She did not lose consciousness, but became very excited, throwing herself about and complaining greatly of her head, sobbing and crying from the pain. She had severe retching, and pain in the cardiac region, and during the attack seemed to be in a condition of great general hyperæsthesia. Her eyes were examined, and double optic neuritis discovered, with abundant hæmorrhages, many recent, and with glistening white patches. The case had presented itself at first as one of intracranial disease—possibly, it was supposed, an abscess connected with the old ear mischief. But the eye changes, the condition of the arteries (thickened) and of the heart (hypertrophied), associated with the presence of albumen in the urine, led to the diagnosis rather of granular kidney.

The day after admission the urine was of a bright-red colour, and contained much recent blood. The albumen was abundant, about one-fourth, but the presence of blood made it difficult to estimate the exact quantity. The urine continued to contain much blood for sixteen days, when it disappeared and the colour became normal, and then the urine contained one-third albumen. During this time the patient had had several of the "attacks" described, and for three days had severe epistaxis. The hæmorrhages, also, in the retina increased in number and size. Shortly afterwards a systolic cardiac murmur, thought to be hæmic, was detected. The patient's condition did not materially change during the next two months, except that she became by degrees profoundly anæmic, and as this developed she began more and more to complain of cardiac pain and dyspnœa. Two months after her admission she had another attack of epistaxis, and a few days later some small purpuric spots appeared on the backs of the hands and legs, which had been for some days slightly œdematous. She now became very noisy and delirious, and continued in this state till her death, which took place about ten weeks after admission. There had been no return of blood in her urine. The post-mortem examination disclosed the typical lesion of well-marked granular kidney. The kidneys were greatly contracted. The left weighed only three ounces, and the right was converted into a small fibrous capsule, with hardly any trace of kidney substance remaining. It measured an inch and a half by three-quarters of an inch. The arteries and veins on this side were also much smaller than on the opposite. No obstruction existed in the course of the ureters, the bladder was healthy, and there was no trace of calculus either in kidney or bladder. The heart was hypertrophied and weighed 15½ oz., a very large size for so small and slenderly built a young woman, for her weight could hardly have been more than 6 st. The arteries were much thickened. The brain was œdematous, but otherwise quite healthy. The case was, therefore, one of well-marked granular disease of the kidney.

CASE 2.—Another case I have met with recently—viz., that of a young man of nineteen, a warehouseman, who believed himself to be in good health until three months before admission, when he suffered from hæmorrhage from the bowels, and was confined to bed for five weeks. He seemed to get well, and remained in his usual health until two days before admission (Jan. 14). He then had a sore-throat and felt sore all over, and in the evening he noticed that his urine was very dark coloured. He had a little pain in the back, and during the night felt hot, then shivered and perspired. There was no history of chill or of any cause for the attack. The patient was pale and of a pasty complexion, with slight herpes on the lips. The right tonsil was slightly ulcerated. There was no œdema anywhere. The urine was porter-coloured, acid, sp. gr. 1014, and contained one-quarter of albumen. The arteries were thickened and the tension raised. The microscopical examination of the urine showed the presence of numerous red blood-cells, with triple phosphate crystals and a few fragmentary granular casts. The quantity of urine passed was on the average above normal. The temperature on admission was 101°, but it fell the next day to normal and remained normal afterwards. The throat affection rapidly disappeared, so that the rise of temperature depended probably upon this condition. Œdema was completely absent. The urine contained blood for a week after admission, and continued to contain albumen, though only a very faint trace, until his discharge nearly three months later. The history of recent sore-throat with albumen and blood in the urine led me to think at first that the case was probably one of diphtheria associated with nephritis, but the condition of the arteries, the long persistence of albumen, and the absence of œdema, convinced me later that the case was one of granular kidney. This conclusion was confirmed by the subsequent course of the case, for the urine for the last two months of his stay was characteristic, being large in quantity (80-100 ounces), of low specific gravity, and with but a trace of albumen.

CASE 3.—Edw. P——, aged thirty-four, was admitted into the Royal Free Hospital as a case of acute nephritis. He had been a free liver and had drunk much beer, but was in good health until one month before admission. Then his legs swelled, and a fortnight later his toes also. On admission there was slight general œdema. The urine was reduced in quantity and contained one-half albumen with granular casts, and was smoky. The eyes were normal on ophthalmoscopic examination. The arteries were slightly thicker than normal for his age. The case ran the ordinary though protracted course of acute nephritis, ending in convalescence. On several occasions while the œdema persisted the urine contained blood, being sometimes bright-red in colour, at other times only smoky. These alterations could not be traced to any cause, for they occurred during the time that the patient was kept entirely in bed. After about two months the œdema completely disappeared, and continued absent till the patient's discharge from the hospital. The albumen was at times completely absent, and at most times there was only a trace; and on several occasions after the œdema had gone the blood returned in the urine, generally to the extent of giving it a smoky tint, but occasionally the colour was bright-red. Generally at these times there was an increase also in the amount of albumen over and above what the blood would account for. The duration of these attacks was about two or three days, during which there was no other change in the patient's condition. The arteries, however, were distinctly thicker and harder on leaving the hospital than they were on admission. I was led to regard the case as one probably of old granular change, with an intercurrent attack of acute nephritis. At any rate, at the time of leaving the case presented the characteristic features of granular kidney.

Since this case I have also seen several others of a similar kind, in which the diagnosis of granular kidney seemed clear, and during the course of which the urine on many occasions contained blood, sometimes only sufficient to give to it the smoky tint for a few days, but at others sufficient to make it bright-red in colour. It is not easy to determine the part of the urinary tract from which the hæmorrhage comes. In the second and third cases it was, in all probability, from the kidney; but in the first the very bright colour and quantity of the blood seemed to suggest its origin from the lower part of the urinary tract. The quantity in this case was so large as to suggest even calculus, but none was present. The difficulty in diagnosis between this condition and calculus has actually occurred, as in a case related to me by Dr. Sharkey of St. Thomas's Hospital. The patient, a young girl, passed so much blood with the urine that the bladder was sounded, and, failing to find a stone, dilatation of the urethra and digital exploration of the bladder was suggested. To this Dr. Sharkey did not, for good reasons, consent; and the patient dying, no stone was discovered on the autopsy, but markedly granular kidneys.

In less severe forms the chief difficulty in diagnosis is from cases of acute nephritis. The second and third patients both had, during the latter part of their illness, a considerable amount of albumen in the urine, and as on most occasions the urine was smoky and not often bright-pink in colour, and also contained a few casts, the diagnosis of acute nephritis was natural, but they presented these points of difference from ordinary acute nephritis: (1) the absence in one case and the existing small amount in the other of general œdema; (2) the great fluctuation in the amount of blood and albumen at different times; (3) the subsequent course of the cases, the diagnosis of granular kidney becoming clear as they progressed.

The hæmorrhage which takes place from some part of the urinary tract in these cases of granular kidney, though uncommon, is not peculiar, except so far as regards its source. The explanation is probably the same as must be given to the hæmorrhage which occurs from other parts in this disease. Epistaxis, often very severe and difficult to control, is one of the commoner epiphenomena. The first case suffered severely from it on several occasions, and once at the same time that the urine also contained blood. Of hæmorrhage from the respiratory tract in granular kidney I know nothing; but bleeding occurs occasionally from the bowels. The first symptom of illness in the second case was such a hæmorrhage from the bowels, which confined the patient for five weeks to bed; and although the cause of this hæmorrhage is not certain, its association is at any rate suggestive. Hæmorrhage into the eye and brain are among the commonest of incidents in the course of granular kidney, so much so that retinal hæmorrhages are of recognised diagnostic value, while brain hæmorrhages explain the apoplexy with which such cases not rarely terminate, and in both organs miliary aneurysms are frequently found. In the cases in which the hæmorrhage occurs actually in the kidney it is possible that there is another explanation. It may prove to take place especially in those cases of granular kidney in which the cirrhotic change is most marked round the Malpighian bodies, and the bleeding may then possibly be the result of the mechanical obstruction to the circulation in the Malpighian tufts. But I know of no observations bearing on this point. On the whole, however, we may with greater probability regard the hæmorrhage from the urinary tract as part of the general vascular changes which occur in this disease, and, if so, it is remarkable that hæmaturia is not of more frequent occurrence in granular kidney than it appears to be.

Wimpole-street, W.

REMARKS ON

THE CIRCULATION OF THE BLOOD.

MECHANISM OF THE ESTABLISHMENT OF VASCULAR CONGESTION: AN EXPERIMENTAL RESEARCH, DEDICATED TO STUDENTS OF MEDICINE.

BY T. WHARTON JONES, F.R.C.S., F.R.S.

Mechanism of the establishment of vascular congestion in a wounded part.—By means of a lancet a wound was inflicted on the ear of a rabbit, dividing an artery, a vein, and capillaries. A small quantity only of blood escaped at first owing to constriction of both segments of the artery by the contraction of their muscular coat, which was excited at the place of section and for some distance beyond; but the arterial walls relaxing in a few seconds, bleeding came on, and continued freely for a time, when it ceased. This suppression of the hæmorrhage was produced by blood coagulating around the retracted ends of the divided artery, and stopping up their constricted orifices; whilst the full stream of blood became diverted into the first considerable branch above. Between this branch and the orifice of the artery, now stopped up by the *external* clot, the materials of an *internal* clot collected, comprising plasma with a number of

white corpuscles therein suspended and some red corpuscles.[1] In order to ascertain in detail the mechanism of the vascular congestion which subsequently takes place in a wounded part, we must have recourse to microscopical observation. In a wounded web of the frog's foot or bat's wing[2] displayed under a microscope, we see that though the direct passage of blood in a divided artery to the extreme ramifications of the vessel be cut off, the capillaries and venous radicles, previously fed by them, become gorged and dilated by distension with blood, in consequence of regurgitation, from anastomosing capillaries and venous radicles to which collateral arterial channels, unimplicated in the wound, directly lead. Into the extreme ramifications of the divided artery themselves a retrograde afflux of blood is continued from the capillaries, so that the former also become gorged and dilated by distension; this being permitted by the relaxation of the muscular walls of the artery which succeeds the contraction thereof at first excited by the wound. The blood, thus regurgitated into capillaries, extreme arterial ramifications and venous radicles not being driven on with much impulse in its retrograde course, the red corpuscles come to aggregate in rouleaux, and thereby accumulating block up the vessels. The mouths of capillaries actually divided in the wound become blocked up in a similar manner with aggregated corpuscles. From the description now given, it will be understood how it is that the vascular congestion is circumscribed and commences on the further side of the wound, chiefly, and that the accumulation of the blood-corpuscles in the capillary network, the small arteries leading to it, and the venous radicles proceeding from it, is owing, not to an increased afflux of blood directly to the part, but to a retention in the part, of the corpuscles of the blood which it receives by regurgitation. Though, when the wound of the web heals, the direct passage of blood through the divided artery may not be restored, dispersion of the congestion gradually takes place in consequence of enlargement of communicating arterial channels, whereby the freedom of the direct circulation through the capillary network and venous radicles becomes re-established.

Mechanism of the establishment of vascular congestion in a part cauterised by being touched with a point of nitrate of silver or of blue stone.—In Guy's Hospital Reports for October 1850, I showed that when the web of a frog, disposed under the microscope, was slightly touched with a point of nitrate of silver or of blue-stone (blue-stone by preference, as the nitrate of silver causes opacity at the place) in the neighbourhood of or over an artery, constriction of the calibre of the vessel was immediately occasioned by the contraction of its muscular walls excited by the irritation, and a check given to the flow of blood. This constriction, however, quickly gave way to enlargement by distension of the calibre with blood in a full stream; this distension (under the influence of the pressure from within by the propelling force of the heart's systole) being permitted by the relaxation of the muscular coat of the vessel which supervened on the momentary contraction. The dilatation of the artery by distension with blood in a full stream was not of long continuance, however, but was superseded by a new constriction, this time to gradual obliteration of the calibre of the vessel at the place which proved permanent, an effect which was owing to degeneration of the structure of the walls of the artery occasioned by the caustic solution in greater strength, having made its way to them by imbibition. With the dilatation by distension of the artery, in the first instance from relaxation of its walls, there was an accelerated flow of blood, causing general vascular fulness of the part; but when the artery became thus constricted to obliteration at the cauterised spot, the blood, no longer finding a passage, drained off by the first considerable branch above, as in the case of obliteration of an artery by section. As in the case also of obliteration of an artery by section, there took place regurgitation of blood into the capillaries and venous radicles, as well as into the extreme ramifications of the artery opening into the capillaries of the region to which the now obliterated artery had led. The corpuscles of the blood thus regurgitated were seen to become aggregated and stagnant. Neighbouring arteries which did not come under the caustic action of the blue-stone, but which were merely irritated by the weak solution of it which reached them by spreading around, having their walls subsequently relaxed, became dilated by distension with the streams of blood now freely entering them. From these rapidly-flowing currents the vessels on the further side of the obliterated part of the cauterised artery received the blood by regurgitation; but the corpuscles of this regurgitated blood becoming aggregated and stagnant, the freedom of the streams in the relaxed and distended arteries adjacent was diminished owing to diversion of the flow into other channels higher up. And thus was established circumscribed and intensely red vascular congestion from stasis of red blood-corpuscles, owing to arrestment of the flow of blood to the spot in consequence of obliteration of the artery leading to it. The mechanism of this congestion, it will be observed, is substantially similar to that of the congestion before described as taking place in a wounded part in which an artery has been divided. The flow of blood in full stream causing general vascularity in consequence of the enlargement of the calibre of the artery by distension of its relaxed muscular coat above described as taking place, in the first instance, it will be observed, had nothing to do with the establishment of this subsequent circumscribed congestion, and much less had any imaginary primary active dilatation of the artery. The explanation here given of the phenomena observed in the experiment of touching the web of a frog with a point of blue-stone is, in all essential particulars, applicable to the late Professor Cohnheim's experiment of cauterising the tongue of a frog with a crystal of the nitrate of silver. The account, however, which he gives of the mechanism of the establishment of the vascular congestion thereby excited is incorrect and betrays very imperfect observation. If he had directed attention to the small artery or arteries of the tongue immediately implicated in the cauterisation, and thence to the capillaries and venous radicles, in order to ascertain the true correlations of the effects on these three different kinds of vessels and the streams of blood in them, Professor Cohnheim would probably have arrived at some such view of the matter as that here given. Although he suspected that the caustic causes some alteration in the structure of the wall of an artery, the experiments which he performed in order to ascertain the nature of this were aimless and inconclusive. The experiment of cauterising the tongue of the frog or toad has been elaborately repeated by Mr. F. Darwin, among others of Cohnheim's numerous followers; but I have no hesitation in applying to him the strictures which I have just made on Cohnheim himself, and would here again declare the alleged primary dilatation of the small arteries to be a mere fancy, and, of course, also the allegation that such constitutes the first step towards the establishment of the circumscribed congestion in acute inflammation. Professor Burdon Sanderson, the most recent English authority, treating of vascular congestion in his article on Inflammation in Holmes' and Hulke's "System of Surgery" (third edition), manifests no clear conception of what it is in nature he attempts to describe. It cannot be made out from his words that he speaks of inflammatory congestion from observations of his own. He seems to have no acquaintance with crucial facts in nature relating to the true mechanism of the extreme vessels and the observable phenomena of the circulation therein, even in the normal state, and much less in the morbid. The phenomena of commencing vascular congestion which he adduces from German observers are, moreover, not properly traced in their true correlations, as I have just objected to Cohnheim's experiment in particular.

Mechanism of the establishment of vascular congestion in conjunctivitis, &c.—In the early stage of pustular ophthalmia,[3] for example, we see the small veins coming from the affected spot of the ocular conjunctiva, enlarged by distension with blood, while the small artery or arteries leading to it are constricted. That this circumscribed spot of vascular constriction depends on an impediment to a full and free flow of blood in the constricted artery or arteries, with consequent retardation of the flow and accumulation of the blood in the capillaries and venous radicles, is shown by what we can directly observe in the web of a frog

[1] See my observations on the subject in THE LANCET, vol. i., 1878. Here, it may be briefly mentioned, in anticipation of remarks which will come to be made at the end of this article, that the collection of plasma with suspended corpuscles is seen oscillating to and fro under the influence of the rhythmical cardiac pressure. By a comparison of the force of the impulses in this oscillation with the force of the full stream passing off by the first considerable branch above, the different degrees in which the cardiac blood pressure is manifested in the two cases may be estimated.

[2] On the State of the Blood and the Bloodvessels in Inflammation. Medico-Chirurgical Transactions, vol. xxxv.

[3] See article "Pustular Ophthalmia" in my treatise on Ophthalmic Medicine and Surgery.

disposed under the microscope. Here we may sometimes see an artery with its calibre more or less constricted by contraction of the circular muscular fibres of its wall to a corresponding extent. In such a case of constriction of the artery, when in a moderate degree, the stream of blood in the vessel encounters some impediment, so that, though not arrested, it is rendered sluggish in the capillaries and venous radicles; but when the constriction of the calibre of the artery is great, the stream of blood is still more diminished both in fulness and force. The corpuscles, accordingly, accumulate in the capillaries and venous radicles to which the extreme ramifications of the artery lead. The same capillaries and venous radicles receive blood also by regurgitation from the anastomosing capillary network fed by collateral arteries in which the circulation is still in full force. It is in this latter manner alone that the capillaries and venous radicles, previously fed by the artery or arteries in question, receive blood when constriction of the calibre of the said artery or arteries is, for the time, so complete that the direct passage of the blood in them is wholly suspended. The red corpuscles of the blood thus accumulated in the capillaries and venous radicles tend to aggregate in rouleaux, and, being retained, come to block up these vessels. Such is congestion by stasis sanguinis, arising from constriction of the small arteries of a part, occasioned by more or less prolonged contraction of their muscular walls, excited by the impression of cold on their vaso-motor nerves, for example. Its mechanism, again, it will be observed, is substantially similar to that of the congestion above described as taking place in a wounded part in which an artery has been divided, and in a cauterised part in which an artery has become obliterated by degeneration of structure. Different, however, from the congestion occasioned by either of these two kinds of causes, congestion from simple arterial constriction, excited, through vaso-motor nervous influence, by exposure to cold, may become rapidly resolved by the supervention of relaxation of the contracted walls, so that the stream of blood, under the influence of *vis a tergo*, distends the calibre of the arteries and drives onward the aggregated red corpuscles stagnant in the capillaries. The mechanism of the establishment of vascular congestion in the ocular conjunctiva in catarrhal ophthalmia is exactly similar to that just described in pustular ophthalmia; and the same may be inferred also in regard to the vascular congestion of bronchitis. Authors, professors, orators, and the young men misinstructed by them, pretending to know how things ought to be better than Nature herself, scout the idea that congestion of blood could take place except by primary dilatation of all the vessels of a part. They seem to be unable to comprehend how congestion can take place by retention and accumulation of blood-corpuscles in the capillary network and venous radicles, in consequence of primary constriction, under the influence of vaso-motor nerves, of the calibre of the small arteries which lead to them, impeding the force of the current, so that they are not duly driven on, thus confounding vascular fulness and rapid streams with congestion and stasis of aggregated red corpuscles. They have, however, no difficulty in seeming to see the things they do not, and cannot when they view inflammatory congestion as the proximate effect of an imaginary primary active dilatation of the small arteries under the influence of equally imaginary "vaso-dilator" nerves.[4] In criticising my thesis, that the congestion under notice becomes established in consequence of a greater or less degree of primary constriction of small arteries, persons of this stamp, adopting that unworthy mode of argument—an *ignoratio elenchi*,—have attributed to me the assertion that "the vessels" of the part are all constricted, and then have valiantly proceeded to refute the phantom thus invoked by their own ignorance or disingenuousness. The contraction of the circular muscular fibres of the wall of the small arteries producing constriction of their calibre may be excited by the direct impression of cold on the conjunctiva or the lining mucous membrane of the air-passages, but more usually it is the result of a chill of the body generally. In this case the impression of the cold on the skin is transmitted to the vaso-constrictor nervous centre, and thence propagated by reflexion to the nerves of the small arteries of the organ which becomes affected, this organ being that which at the time happens to be the most susceptible.

The *modus operandi* of a chill in bringing on inflammatory congestion is described by the authors and professors just mentioned as those believing that congestion of blood is primarily owing to dilatation of all the vessels of the part affected—notably, M. Paul Bert, following the late M. Claude Bernard—to be by inducing in some incomprehensible manner a mythical primary active dilatation of the calibre of small arteries under the influence of imaginary vaso-dilator nerves. In a case of vascular congestion with stasis sanguinis arising from arterial constriction we see, as above stated, that if relaxation of the muscular coat of the arteries should supervene, blood is then forced into these vessels by *vis a tergo* in full stream, distending their calibre, so that the blood-corpuscles, accumulated and stagnant in the capillaries and venous radicles, are gradually driven on before it and the free circulation in the part becomes re-established. For a pustular or catarrhal conjunctivitis an irritating collyrium dropped into the eye is the well-known appropriate remedy, and its *modus operandi* we can observe in a similar case of congestion in the web of a frog examined under the microscope, as I long ago showed. We see that the application of a drop of such a collyrium, after exciting a transitory constriction of the arteries with an increase of the congestion, is quickly followed by dilatation from distension of the calibre of the arteries with a full and free flowing stream of blood, this distension being permitted by the relaxed state of the arterial walls which supervenes on the contracted state at first excited by the action of the irritating collyrium. Here the *modus operandi* of the remedy is a proof of the nature of the proximate cause of the inflammatory congestion.

I have before pointed out that if the ischiatic nerve in the thigh of a frog be divided paralytic relaxation of the muscular wall of the arteries of the web is induced, so that the stream of blood entering these vessels widens their calibre by distension and flows with increased fulness and rapidity into the capillary network and venous radicles, enlarging them also by distension. An effect of the vascular fulness visible to the naked eye is a general blush of redness in the skin of the leg, followed after a time by serous effusion, whereby exfoliation of the epidermis and œdema of the leg are occasioned, with a great tendency to ulceration of the toes. At the ulcerated place congestion by stasis now supervenes, as in the case of a wounded part. In such cases of paralysis of the arterial walls the fulness and force of the stream of blood opposes to a very great degree the aggregation and stasis of red corpuscles in the capillaries, which is otherwise caused so readily by the application of a strong solution of common salt to the web. Conversely, in cases in which, before division of the ischiatic nerve, there was congestion of aggregated corpuscles in the capillaries and venous radicles, I showed in Guy's Hospital Reports for October, 1850, that the increased fulness and rapidity of the stream of blood which take place in the small arteries paralysed by the division of the ischiatic nerve quickly dispersed the congestion; an effect similar to that just described as being produced by the application of a drop of irritating collyrium to an inflamed conjunctiva or a congested web.[5] As above mentioned, however, the same effect is not produced in the case of congestion around a wound of the web. On the contrary, this congestion is increased.[6] If a wound of the web is made subsequently to the section of the ischiatic nerve, or if ulceration supervenes, greater vascular congestion than usual takes place, in like manner, around the wound. In either case the granulations which form in the course of the healing process are more luxuriant than we find them in the healing of a wound of the web when the ischiatic nerve has not been divided, and no increased general vascular fulness consequently established. Physiologists and pathologists engaged in experimental research, however, continue to confound *general* vascular fulness arising from increased afflux of blood in consequence of relaxation of the muscular walls of small arteries with *circumscribed* vascular congestion by stasis of the blood-corpuscles in the capil-

[4] See my article in THE LANCET for November 15th, 1884.

[5] In the thirty-fourth number of the *British and Foreign Medical Review* I had before that accepted the opinion that inflammatory congestion and stasis sanguinis arise primarily from dilatation by relaxation of the arteries; but after performing this experiment of dividing the ischiatic nerve, and observing the effect here mentioned on the flow of the blood, I formally renounced the opinion. (See Guy's Hospital Reports, as cited.)

[6] See my preparations of wounded and inflamed webs of the frog injected with their own blood in Guy's Hospital museum, and the description of them in the Reports for October, 1850, so often referred to.

laries, depending primarily on constriction of the small arteries leading to them by contraction of their muscular walls; thus erroneously supposing to be a proximate cause of inflammatory congestion that which is in reality the proximate cause of its resolution.

(To be concluded.)

NECROSING ETHMOIDITIS; ITS RELATIONSHIP TO THE DEVELOPMENT OF NASAL POLYPUS, OZÆNA, &c.[1]

BY EDWARD WOAKES, M.D.,

SENIOR AURAL SURGEON AND LECTURER ON OTOLOGY TO THE LONDON HOSPITAL, SENIOR SURGEON TO THE HOSPITAL FOR DISEASES OF THE THROAT.

I HAVE proposed to call this disease *necrosing ethmoiditis*, because it is characterised by inflammation of the nasal tributories of the ethmoid bone, including its muco-periosteal lining; and while its most objective symptom consists from the first in an enlargement of the lower turbinated process of this bone—the middle spongy bone of the nose—its progress from an early date is marked by the presence of squames or spicules of dead bone detached from the trabeculæ of the internal osseous structure, and which remain concealed in the depths of the tumour. This necrosing process, which commences usually in the spongy projection, gradually and insidiously invades the anterior and posterior ethmoidal cells. The presence of these necrotic spicules can be readily detected by a particular manipulation to be described later on.

It is to be specially noted that the lining membrane of the spongy bones, spoken of above as *muco-periosteum*, dips into the spongy tissue of the bone, and in this twofold histological aspect lines the cells and their osseous dissepiments or trabeculæ. In this way is introduced a new element, absent from the cancelli of most other bone structures—namely, the mucous membrane element. It is to the presence of this factor when affected by the disease under review that a solution will be afforded of its relationship to the origin of polypus. The disease, then, being a *chronic inflammation* of all the tissues of the ethmoid, associated with more or less of the interstitial death of the bony dissepiments which separate and enclose the cellular spaces of this bone, appears to justify the term above mentioned. Its appropriateness may perhaps be further established from a consideration of the clinical and pathological details of the disease contained in the following observations.

The *character of the inflammation* is in its origin catarrhal. It commences in the muco-periosteum of those processes of the ethmoid bone which project into the nasal fossæ, gradually extending from without inwards. Whilst the progress of the disease is aggravated, as well as distinctly altered by the coexistence of an inherited or acquired syphilitic taint, it would appear that almost equally severe types of it have occurred in patients in whom there was no reason to suspect, and no ability to trace, an enthetic diathesis. For the purposes of this paper, I have collected and tabulated the details of eighty such cases. From these tables, as well as from my private note-book, the following account of the clinical aspect of the disease has been mainly derived.

Etiology.—It is seldom that patients are seen until they have reached a considerable advance in the disease. The history is then various. Some state they have had trouble between the throat and nose as long as they can remember; the symptoms being increased, and fresh ones being added after a severe cold in the head. In others the mischief is traced to an attack of an exanthem, usually measles or scarlet fever. Frequent attacks of severe and prolonged nasal catarrhs in youths are quoted by most, and should emphasise the importance of giving more attention to these conditions than they usually receive. Blows on the nose have been referred to as its starting-point in a small number of cases. As regards *sex*, there appears to be but little difference in the frequency with which the disease attacks either. A slight preponderance in favour of females is indicated by my tables. The disease is most frequently bilateral; when it occurs singly the left side is more frequently affected than the right. It may be found at all ages, and some of the most advanced cases have been met with in quite young adults of either sex.

Diagnosis.—For the purpose of inspecting the region implicated, the head of the patient should be inclined slightly backwards. A non-fenestrated speculum is then introduced within the nasal meatus, so as to expand the alæ, and traction made upon it in such a way as to bring its lumen more or less into the horizontal plane. Then, a good light being reflected into the cavity, if nothing intervene, the middle spongy bone will be visible situated deep in the fossa, behind and above the lower spongy bone. Usually it is only the thin anterior margin of the bone that can now be seen as a pale, rounded, thin surface about a third of an inch long, descending, as it appears to do, from the roof of the nasal cavity, but in reality curving downwards from its connexion with the outer wall of the fossa. Occasionally, in a favourable subject, the flat perpendicular plane of the bone is seen foreshortened and retreating into the shadows of the recess. Should any marked deviation of the septum or thickening of its surface project into the cavity, this will cut off a portion of the view. Similarly, an enlargement of the lower spongy bone may completely obscure the region the above measures are designed to enable the observer to inspect.

The earliest appearance of this disease, so far as I have been able to recognise it, is indicated by the presence of one or more oval or rounded projections somewhere on the anterior margin of the bone, the mucous membrane overlying which is redder than in the adjacent parts. At a later period these projections run together, so as to give the presenting margin a uniformly thickened and more prominent appearance. This gradually increases in size, giving rise to a large protuberance, which occupies an extensive share of the space allotted to the middle channel of the nose. Occasionally an exostosis-like spur is thrown out, which presses against and indents the septum at the point of contact with it. When not obscured by scabs of dried secretion, the surface of the tumours throws back a bright reflex of light.

As regards the *size attained by these tumours*, the specimens removed during treatment, and now exhibited, indicate that they average that of an ordinary date-stone, though some are much larger. Almost invariably the septum yields where the tumour approaches it, and is pushed over to the other side. The nasal bone and the corresponding process of the maxillary bone give somewhat, so that to a careful observer the outside contour of the nose is seen to be expanded. If the disease is bilateral, this effect will be more marked; as its access is gradual and symmetrical, this broadening of the bridge of the nose is often unobserved.

Still later on in the disease we arrive at the *proliferating stage*. The mucous surface of the tumour, instead of being red and glistening, is now more or less covered with soft, reddish, fleshy growths. At this early stage of their development they possess very little of the characteristic appearances of mucous polypi, which, however, they are destined to become, but at present are firmer, redder, and flatter than is the case with fully developed polypi. Some of these incipient myxomatous projections spring from the surface, whilst others protrude from behind the outer aspect of the spongy process. The origin of these latter will be shown in due course, when they will be seen to possess some unexpected relationships.

So soon as the disease has passed the period described as its first stage, and in any subsequent stage of its progress, the element of *necrosis* will be present. The following is the method of detecting it. A thin probe, preferably a canaliculus probe, is passed above the surface of the inferior spongy bone and under the projecting shoulder of the middle bone, so as to pass between the latter and the outer wall of the nose. When it has traversed a short distance in this direction it will enter the ethmoid bone through the natural opening which exists at this point, and is known as the hiatus semilunaris, and which is usually a good deal enlarged in the disease now under review. Either at this point, or in the pathological breach in the turbinated process which is formed sooner or later in the outer aspect of the spongy process, the probe will grate against exposed and roughened spicules of bone. If the probe is passed further into the anterior ethmoid cells (which

[1] Read at the Medical Society of London, March 30th, 1885.

communicate with the frontal sinus) more evidence of the necrotic process will be detected. The search for exposed bone should be extended by withdrawing the probe somewhat and directing it towards the roof of the nose above the tumour. It will then enter the orifice of communication with the posterior ethmoidal cells (which likewise communicate with the sphenoidal sinuses), and which is usually also enlarged, and where often rough and exposed bone, offering a very firm resistance, will be encountered. When, therefore, the disease has reached the stage above indicated, the presence of exfoliating particles of bone is always to be met with. The occurrence itself, and the process by which it is brought about, belong to the pathology of the subject, and are well illustrated in the microscopical section shown in Fig. 1. The condition justifies, I

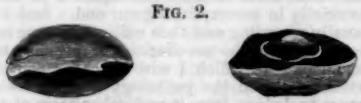
FIG. 1.

A bony trabeculum with two spicules, and a portion of its neighbouring surface laid bare: necrosis.

submit, the term applied to the disease in this communication—viz., necrosing ethmoiditis. It is to be noted also that the presence of necrosis antedates by long periods the objective appearance of polypoid growths.

At this point it is desirable to call attention to the circumstance above referred to as the *pathological breach* in the outer aspect of the turbinated bone. In nearly all the tumours I have removed by operation this breach is very evident; it is seen in the examples exhibited, but in some more clearly than in others. (Fig. 2.) The

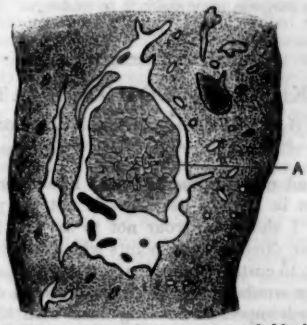
FIG. 2.



Tumour showing pathological cleft on outer wall. The tumour from two aspects as seen by naked eye; that to the right shows breach in outer surface, described in context.

manner of its occurrence becomes obvious on inspection of several of the microscopical specimens, and also in one of the drawings illustrative of the microscopical sections. If one of these specimens is held up to the light, it will be seen that the centre of the osseous structure is occupied by a roundish mass of softer material, which under the microscope resolves itself into true myxoma. (Fig. 3.) There may be several centres of such proliferation in one tumour. This development is produced by the extension of the disease to the portions of muco-periosteum which dip into and line the trabeculæ of the spongy body. Furthermore, it is to this tendency of the muco-periosteum thus situated to proliferate in the direction of myxoma that the great bulk attained by some of these tumours is due. The increase in size cannot be referred to the formation of new bone, because careful scrutiny has failed to detect any approach to such a regenerative effort as is seen in other situations, where new bone is deposited side by side with a necrosis. The upshot of the process just detailed is that after reaching the limit of distension the tumour is ruptured at its weakest point. This is always at the part indicated—viz., the outer aspect of the turbinated bone, and just below the infundibulum. If the case is one in which tissue proliferation is advancing rapidly—and there is great variety in this respect in different individuals,—it will not be long before evidence of its progress is seen in the extrusion of the myxoma from under the spongy bone, to which phenomenon reference has been already made. Judging from a comparison of advanced cases with those in an earlier stage, it would appear that this cleft progresses in such a manner as to divide the anterior two-thirds of the turbinated body into two or more layers. This process of cleavage is largely aided by simultaneous canalisation of the bone, exemplified in the microscopical sections. (Fig. 4.) The osseous elements of the now bipartite tumour become completely necrosed except at their attachments, and are hidden from view by the overlying myxomas—both those

FIG. 3.



A, Myxomatous centre of tumour surrounded by bone.

derived from the superficial tissue as well as those proceeding from within the tumour,—though the exposed state of the bone is readily made out by introducing a probe into the diseased mass.

So far, then, by means of clinical observation, we have become conscious of the following pathological changes introduced during the progress of the disease:—1. The superficial muco-periosteum becoming increasingly thicker, gradually showing neoplasms at first resembling granulation tissue, which finally pass into true myxoma—i.e., mucous polypus. 2. The presence of denuded spicules and squames of necrosed bone, with the gradual cleavage of the spongy process into two or more sections, the latter being explained in part by the pathological process of canalisation which the microscopic examination shows to be taking

FIG. 4.

A bony trabeculum fissured by a canal with irregular outlines, containing granular débris and inflammatory cells. The surface of the bone is eroded in several places.

place *pari passu* with the other products of the disease. 3. The emergence of polypoid growths from within the tumour, a circumstance microscopically shown to be due to the development of isolated foci of myxoma in the centre of the diseased spongy bone.

The gross result of these processes is to present us with the phase of the disease in which polypoid growths are its most objective symptom. Whether these will be flat and

sessile, or bulky and pedunculated, depends chiefly on their situation, and to some extent also on the rate at which they progress. Hence to regard such a case as one simply of mucous polypi, and to treat it as such, is clearly to misapprehend the nature of the disease. For if the observations just recorded possess any significance whatever, they obviously imply that polypus of the nose is only one symptom of a much more important and far-reaching disease—namely, that of necrosing ethmoiditis. This statement does not ignore the fact that mucous polypi may arise from the lower spongy body, or from the osseous portion of the septum nasi. But in both the origin of the disease is essentially the same as that under review; and as regards the lower spongy body, its anatomical connexions are so comparatively unimportant that it will tolerate almost any kind of treatment that the eradicating genius of the surgeon may cause it to undergo.

(To be concluded.)

REMARKS ON LOCOMOTOR ATAXIA.[1]

BY RALPH M. CANFIELD, M.D., L.R.C.P. LOND., &c.,
FORMERLY OF LA SALPÉTRIÈRE, PARIS.

A LONG and minute description of locomotor ataxia in all, or in fact in any, of its stages is not the province of this paper. I shall endeavour not to say anything which does not bear directly upon points which I wish to bring out, and also to curtail quotations as much as possible.

First, a few words on the diagnosis of tabes dorsalis. I was very much impressed not long since with the liability which a hasty examination allows of mistaking this affection even in its second stage for cerebellar disease; and though the distinction between the movements and attending symptoms have been ably pointed out by Dr. Hughlings Jackson, yet I feel that a few remarks on a type picked from several cases which have come under my notice would not be a waste of time. Had a correct diagnosis been made the man's life in the case in question might have been saved for some time longer, probably, than it was. At any rate a warning of impending death from apoplexy might have been given, and the man cautioned as regards hard work, &c. accordingly.

A. B——, labourer, aged forty-seven, a robust healthy-looking man, weighing about 12 st. His family history revealed no tendency to nervous lesions whatever, and he had enjoyed the best of health till about two years ago, when a "peculiar unsteadiness of gait" was noticed, as his friends expressed it. An examination revealed to his medical attendant a meagre syphilitic history, absence of reflexes, reeling or swinging motion as he tried to walk, inability to preserve equilibrium with closed eyes, and wandering pains in different parts of his body, but these were not described as of a lancinating character. No other material of worth could be obtained.

Now, from the above, the diagnosis should have turned upon the character of the gait, which from the description given me by the medical attendant led me to believe that cerebellar disease was the lesion, contrary to his diagnosis. The man having been found dead we proceeded to make a post-mortem examination. This revealed the cord as perfectly normal, but a clot was found occupying the fourth ventricle, traces of blood extending up through the *iter a tertio ad quantum ventriculum*, and in the third ventricle there was found another clot. Upon careful examination old cerebellar disease of nearly the whole of the right side of the cerebellum existed. Degeneration had proceeded so far that the consistence was more like paste than it was like that of the other side. A number of the arteries were carefully traced, and a rupture of a small branch of the anterior inferior cerebellar was found. Abrupt endings of several small branches were also found, showing that there had probably been a number of ruptures, but that the arteries had had vitality enough to recover themselves before damage of consequence was done. The cause of death, therefore, was from pressure due to the pouring out of blood from the ruptured weakened vessels. The man was thus cut off without a moment's warning, as the prognosis had been—"As to immediate results, favourable; but as to ultimate recovery, unfavourable." The pains were probably either of rheumatic or syphilitic origin, and thus were not significant. Concerning the loss of the tendon reflexes, everyone who has seen a large number of cases of different cerebellar troubles has probably noticed how often this phenomenon has been absent. In the cases which have come under my notice it has been absent more often than present. Heel-pound of the ataxic, when taken with the jerking outward or inward of the limb, forms such a striking contrast with the reeling or sliding gait of cerebellar disease, that, when seen together, it would seem to be an impossibility to mistake them. In the latter disease the lateral departures of the limbs from the lines on which the patient is trying to walk are made voluntarily in order to maintain equilibrium, whereas in tabes dorsalis the movements themselves are the cause of tottering, and are justly termed incoördinate. The patient reels in cerebellar disease, and is obliged to alter the course of his foot by voluntary effort in order to keep from falling; while in the other disease the foot, being no longer under his control, shoots out of its own accord, and it is only by the patient's redirecting his energies that he again becomes steady. Duchenne de Boulogne[2], soon after he described the disease, mapped out these differences in his answer to Voisin, and many have since made additions. If the movements be carefully studied, it seems as though a mistake should never be made.

Here I wish to notice a symptom in the first stage of tabes which, I believe, has not been mentioned before—a symptom which I have found very often, if not always, present, and which has sometimes aided me in making a diagnosis at a very early period. Of course it has been included in the class called "sensory disturbances," but I believe it has not been separately described. As a rule, when a person has been in the horizontal position for a considerable time—as, for instance, all night—and brings his feet suddenly but not violently to the floor, and sustains his weight thereon, there is a peculiar tingling sensation on the soles of the feet, compared by the patients to their having gone to sleep. It is most sensibly felt in the anterior portion across the tarso-metatarsal articulation. I believe it is usually present almost as early as any symptom which would cause a patient to seek medical advice. Its explanation I cannot give. This is not that sensation of treading on a thick sock described by some writers, nor is it the feeling of peas in the boots, but it is a distinct sensation of "pins-and-needles." It is usually thought by the patient to be of such slight consequence that it is only elicited when brought directly under his notice. I am well aware of the tendency at the present day toward the heaping up of fantastic distinctions, but sometimes the pathognomonic signs are so buried that symptoms which seem of little consequence in themselves aid us materially in accomplishing our end. And it is only by continually recording and then culling that we may hope to completely fathom the peculiarities of any disease.

The second case to which I wish to call attention bears more particularly upon the pathology of the disease, and I shall venture to deduce from it and other cases of the same type which have been reported, certain conclusions which must bear very forcibly upon the formation of a correct idea as to its primary origin.

C. S——, aged forty-one, a farm labourer, weighing about eleven stone. His appearance was as though he enjoyed fairly good health. His family history revealed a line of nervous troubles of some length. The grandfather had had two attacks of hemiplegia, but the cause of death could not be made out. The father died of apoplexy, and one brother had been for some time in an asylum for, as nearly as I could make out, an attack of acute mania, which had become chronic. There was one other brother who was comparatively healthy. Concerning the two sisters, both were undoubtedly hysterical; one, who was much worse than the other, had already patches of anæsthesia, and at the same time amenorrhœa, with other confirmatory symptoms. The patient had enjoyed fairly good health till about twelve years ago, when he contracted syphilis. He underwent a line of specific treatment, and although relieved in a measure, yet he said he had never been perfectly well since. He had suffered from time to time from violent pains, which had been pronounced rheumatic, syphilitic, &c., and had had sore-throat, &c., and later the characteristic tertiary symptoms. About three years prior to my seeing him the

[1] A paper read before the Hunterian Society of London, April 8th, 1885.

[2] Half-yearly Abstract of the Medical Sciences, vol. xl., p. 67.

pains had become very much worse. There was great fatigue, so much so that he was obliged to give up work of all kind. He distinctly remembered those sensations in the feet of which I have spoken in the earlier part of this paper. He then consulted a noted local physician, who pronounced the trouble to be locomotor ataxia, and treated him accordingly; but the disease had continued its onset, and had presented a continuous and almost perfect chain of symptoms ever since. When I first saw him, the following was the condition: Partial loss of the tendon reflexes, and narrowing of the field of vision to about one-half its normal appearance. The disc presented a very pale aspect, and there was undoubtedly approaching atrophy. The pains, which were described as having been of a lancinating character, were now a little better than they had been a year ago. The gastric crises were also not quite as bad as they had been. Sensory disturbances were getting worse every day, as he expressed it. On asking him to walk a little, the peculiar gait was typical; and on closing the eyes there was decided loco-ataxia, but not at all in proportion to the amount of motor-ataxia. Upon trying to drink a little water, he spilled a portion of it while taking it from the table to his mouth. He said that the incoördination had begun about two years ago, and had gradually become worse.

Now, the foregoing seemed to me to constitute without doubt that chain of symptoms, when taken in connexion with ancestral and previous history, we call locomotor ataxia, and I treated him accordingly, applying the thermo-cautery to the spine, and giving large doses of the arseniate of soda (one-eighth of a grain three times a day). He professed to be getting better, but I never saw any of his symptoms ameliorate in the least. About three months after I saw him he was taken ill, and died in the course of a few days from double pneumonia. With a great deal of difficulty I obtained a post-mortem. All the organs were comparatively normal with the exception of those appearances which were attributable to the pneumonia, the lungs being nearly solid. The cord, medulla, and cubes from different portions of the encephalon were secured, hardened, and sections from them mounted.

Now, I have given a detailed description of this case in order to show that due care was taken all the way through to exclude the possibility of error in any direction, as the result was anything but that which I had expected to find. About twenty sections of the cord and medulla taken at as nearly as possible equal intervals are preserved and mounted, and in not one of them is a single particle of sclerosed tissue. In the anterior grey horns, the posterior columns, the columns of Goll, &c., and in fact all portions where sclerosis is usually found, not a particle of degenerated tissue could be discovered. I think the first case of the kind was reported by a German author, and it was one in which they first tried nerve-stretching for the pains. It will be remembered that in the case of the sciatic nerve the operation was very successful; but when it was tried in the brachial plexus the patient died while under chloroform, and the result of the autopsy was precisely like my case. We now have reports of cases with many different portions of the cord found affected both collectively and individually. In some cases the sclerosis is wholly confined to the anterior grey horns,[3] in others to the posterior root-zone,[4] and again to the internal radicular fasciculi.[5] In certain portions of the cord the columns of Goll may be alone affected.[6] Now, any one of these alone, or all affected together, have been shown to produce the typical disease, and if anyone will recall the different conducting paths of the cord as a whole, he cannot but see that none of them are essentially the cause of the incoördination. And, finally, my case, with others of the same kind, prove that we can have the typical disease without the slightest portion of sclerosis in the cord whatever. This seems radically to contradict the theory which for a few years back has been so universally held—viz., that tabes is essentially a sclerosis of some one or more portions of the cord.

Ross[7] gives us as his endorsed modification of Erb's[8] theory the following:—"My own opinion is, however, that the ataxic symptoms are caused by disease of the cerebello-afferent conducting paths." He does not say anything concerning the production of that train of symptoms which constitutes the first stage, but confines himself wholly to the second and third stages. Something must produce the earlier as well as the later manifestations, and if tabes is a disease of the cord essentially, why are not the incoördinate symptoms manifest from the first? We have lately had the report of some investigations which bear directly upon this point conducted by Professor Luciani. He succeeded in removing the cerebellum of a dog, and some good notes from his paper may be found in the *British Medical Journal* of December 6th, 1884. He says that while the process of healing was going on the animal's movements were incoördinate, but as soon as it became perfectly well it did not manifest incoördination in the least, but rather a kind of motor asthenia, being able to execute movements which did not call for a large amount of power as well as it ever could, but as soon as an extra amount of force was called into requisition the animal sank, unequal to the emergency, which simply showed deficient muscular tone. Professor Luciani illustrates this by saying that the animal could swim as well as it ever could, not the slightest incoördination being noticeable, but that when it tried to run or walk its powers failed and the movements became ataxic.

Now, if diseases of the cerebello-afferent paths were the essential cause of the incoördination, surely, removing their centre would produce either perfect ataxia or complete paralysis, neither of which it did. This seems to point us somewhere else for our primary lesion in locomotor ataxia, as the tabitic is incoördinate in those movements requiring the least effort, as well as in those taxing all his energies. Leyden advanced a few years ago his theory of want of muscular government on account of disordered sensation, and in it he deals more with peripheral manifestations than he does with central productions. If he had followed those sensory disturbances back to their probable cause, the nerve-cell where they are produced, his theory would not have fallen into the disfavour it has, but would long since have formed the basis of probably the correct one. He considered that the receipt of disordered intelligence through the sensory system caused the sending out of motor force in wrong directions, producing gyrations intended by the patient to answer the call of impulses received. This has long since been shown to be impossible, as the amount of incoördination bears no proportion whatever to the amount of disordered sensation. Time prevents my tracing several others out which would be both interesting and instructive, but most of which are only modifications of those already mentioned.

So it seems to me that we must look further for the original cause of the incoördination and other attendant symptoms, and consider the changes which are seen in the cord as merely secondary results of the morbid action going on somewhere else. For instance, we should not for a moment contend that true paralysis agitans is a disease of the muscles themselves, which are engaged in the tremor simply because the manifestations are here seen only, but rather that it is a morbid appearance of nervous forces. Now, if this be the case, why should we confine our ideas as regards the lesions to the macroscopical, or even to the microscopical, appearances?—still less so when they are found to be so varying as they have been even in perfectly parallel cases. It seems to me that the primary morbid development must be referred farther back, even to the very origin of the fasciculi, and that the sclerosis of the different columns, roots, and horns of the cord are dependent upon a false use, so to speak, or perhaps upon no use at all. Our muscles atrophy if neglected; our arteries and veins, if plugged or tied and no longer used, become entirely changed in texture, and an expert could hardly tell their former functions; so why is it not more than probable that the connective tissue, the neurilemma, and finally its filament, may degenerate and finally sclerose upon the transmission of morbid force?

Professor Foster first put forth the theory of the twofold function of each nerve cell,[9] and on its basis alone can the different nervous phenomena be explained. He holds that each individual nerve cell has a twofold function, or, in other words, two powers: one that of force-generating, and

[3] Leyden: Deutsche Zeitschrift für Klin. Med. 1877.
[4] Pierret: Sur les Altérations de la Substance grise de la Moëlle Épinière dans l'Ataxie Locomotrice, &c. Arch. de Physiol., tome iii., p. 599.
[5] Charcot: Sur les Maladies du Système Nerveux, tome ii., p. 10 et seq. Strumpell: Beiträge zur Pathologie des Rückenmarks, Die pathologische Anatomie der Tabes, Arch. für Psychiat., Bd. xii., p. 723.
[6] Ross: Diseases of the Nervous System, vol. ii., p. 2.
[7] The Diseases of the Nervous System, vol. i., p. 183.
[8] Ziemssen's Cyclopædia of Practical Medicine, vol. xiii., op. cit.
[9] Text-book of Physiology, op. cit.

the other that of force-controlling. The former gathers from the protoplasmic chemical change going on within the cell walls that fluid which in its manifestations we call nervous force, while the latter presides over the exit of the gathered power, and only permits it to exercise its influence upon the muscles as it is demanded to carry out some project of the will. In the case of the involuntary muscles an inherent automatic power would take the place of the will. Dr. Gowers[10] has ingeniously applied this theory to account for epileptiform seizures. He says in effect that epilepsy is a disease of this force-controlling power. Sufficient force is supplied, but that function which commands and directs it in its proper channels is deranged, hence the spasmodic exhibition of what would be under ordinary circumstances voluntary motion. In the same class with epilepsy must come chorea, the true paralysis agitans, and, it seems to me, locomotor ataxia. They are all involuntary exhibitions of what under ordinary circumstances would be voluntary power.

Mickle[11] has pointed out the close relation between locomotor ataxia and general paralysis, showing that they go hand in hand much oftener than could possibly be accounted for on the ground of simple coincidence. I believe that quite a large number of cases are soon to be published by a London gentleman confirming Mickle's observations. This seems also to point toward the central character of the disease. Wilkes, I believe, has lately discarded the former pathology on the very grounds set forth in this paper; but he goes so far as to say that this is no disease at all, but rather a collection of symptoms dependent upon no localised lesion, and that they collectively and individually occur without any direct significance. But is it at all probable that such a train of symptoms as we meet with day after day, bearing such a close relation to each other and following such a decided course as these do, should not be dependent upon some definite pathology? True, the disease may rest upon the borderland of the so-called atrophic troubles, but it seems to me that we must look to the motor centres themselves for its true genetic pathology, and perhaps we shall come to recognise locomotor ataxia as a functional disease. Yet let us hope that that list of functional diseases which now so appals every student and almost puts to shame every investigation may be soon reduced in numbers, and that our descendents, if not we ourselves, may be able better to trace Nature not only in her coarser and grosser wanderings, but also to look even into the individual molecules, and there watch the chemical decomposition and the isomeric transformation of atoms[12] which in all probability produce both thought and power.

A Mirror
OF
HOSPITAL PRACTICE,
BRITISH AND FOREIGN.

Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Proœmium.

UNIVERSITY COLLEGE HOSPITAL.

TWO CASES OF REMOVAL OF THE WHOLE TONGUE FOR EPITHELIOMA; REMARKS.

(Under the care of Mr. BERKELEY HILL.)

EXCISION of the tongue in cases of cancerous disease of that organ is undertaken by the surgeon with the view either of entirely removing the disease or of relieving pain. The following methods of operation have been suggested: (1) Excision of the whole or a portion of the tongue from the mouth; (2) removal after division of the lip and jaw; and (3) excision through openings below the jaw. The removal from the mouth by means of scissors when possible, as in the second case recorded, is the one which finds most favour at the present day, incisions for the removal of diseased glands being afterwards made according to the necessity of the case. Division of the lower jaw adds considerably to the risk of the operation, and is not performed unless it is not possible to reach the growth without, or unless the jaw is infiltrated by the disease. The submental operations are rarely performed.

For the following notes we are indebted to Mr. Bilton Pollard, surgical registrar.

CASE 1. *Epithelioma of the Tongue and Sublingual Tissues; Removal of part of the Lower Jaw, Tongue, and Sublingual Tissues; Rapid Recovery.*—W. W——, a man aged fifty years, was admitted to the hospital on March 16th, 1885. He stated that he had had pain in swallowing during the last seven months, and that he had noticed a lump beneath his chin for about three weeks. On admission the tongue was much enlarged, and the left side of it was the seat of a hard new growth; there was no ulceration of the dorsum or the side of the tongue, but the tongue was almost immovably fixed to the floor of the mouth, and the submental tissues were much indurated. There were three enlarged glands beneath the left angle of the jaw.

On March 25th Mr. Hill made an incision in the middle line of the lower lip down to the bone, and dissected off the labial tissues from the front of the lower jaw; he then divided the lower jaw in the middle line, and, finding the bone was implicated, he divided it again on the left side just in front of the masseter muscle, and on the right side just beyond the first bicuspid tooth. Mr. Hill then commenced to free the tongue and submental tissues from the superficial tissues of the neck; but as the breathing became embarrassed, owing to escape of blood into the pharynx, he opened the trachea and put in a tracheotomy tube, through which the anæsthetic was administered during the rest of the operation; a sponge was placed at the back of the pharynx. The tongue and sublingual tissues were then snipped away from the mere superficial structures, first on the one side and then on the other, with scissors; the right lingual artery was seen before it was cut, so it was first seized with a pair of forceps, and then tied; the left lingual artery was divided, but it was quickly seized with the forceps, and tied. Both sides being freed, the tongue was then separated from the hyoid bone on the dorsum, and was pulled strongly outwards, whilst the snipping with the scissors was continued from the dorsal surface till finally all the structures beneath the tongue were removed as low as the hyoid bone, the tendon of the left digastric muscle being removed with the growth. One enlarged lymphatic gland lay close to the sheath of the carotid artery, and in its removal the left facial was wounded, but the bleeding was quickly arrested. The edges of the wound were brought together with six wire sutures, and dressed with iodoform and iodoform wool. The parts removed consisted of the portion of the lower jaw from the right canine to the first left molar tooth inclusive, the entire tongue, both sublingual glands, the left submaxillary gland, and a chain of lymphatic glands which reached lower than the level of the hyoid bone. The right half of the tongue was normal. Microscopical examination of the left half of the tongue and submaxillary gland showed them to be largely occupied by fibrous tissue and small round cells; in many places tubes of squamous epithelial cells ramified through the tissue; in the more superficial parts the cells were distinctly epithelial and had dentated borders, but in the deeper parts the cells were smaller and were contained in areolar spaces, and resembled rather the arrangement of cells in carcinoma. After the operation the patient was fed by nutrient enemata, and in the afternoon of March 26th (the day after the operation) Mr. Hill passed a tube through the mouth into the stomach and some "egg-flip" was administered, the patient being fed in a similar manner afterwards. The temperature usually ranged between 98·4° and 99·6°, and reached 101° on only one occasion and 100° on two. The tracheotomy tube was removed on the thirteenth day after the operation. An enlarged lymphatic gland was detected in the right submaxillary region on the nineteenth day, and this with two others that after removal were found to be normal were excised on the twenty-first. The only difficulty and trouble the patient experienced after the operation was from mucus collecting in his mouth and throat and from the irritation of the ends of the divided lower jaw. The patient began to feed himself by the mouth on the twenty-eighth day, and expressed himself as being quite freed by the operation from

[10] Treatise on Epilepsy, op. cit.
[11] THE LANCET, vol. i., 1881.
[12] Herbert Spencer's Principles of Psychology, vol. i., p. 21.

his former constant pain and discomfort. He was discharged on the forty-sixth day after the operation; two glands could then be felt in the neck.

CASE 2. *Squamous Epithelioma of Tongue: Removal with Scissors; Temporary Relief; Death eight months later from Recurrence.*—G. L——, male, aged fifty-five, was admitted into the hospital on April 1st, 1884. He had been a great smoker, had had syphilis thirty years ago, and white patches had existed on his tongue for three years. On admission there was an epitheliomatous ulcer on the anterior third of the middle of the tongue, and behind it there were white patches on the dorsum of that organ; the lymphatic gland beneath the genio-hyoid muscle and those at the angles of the lower jaw were enlarged. Mr. Hill removed the whole tongue with the scissors according to Whitehead's method; four arteries bled freely on the right side, but only one on the left; they were easily secured and ligatured. The stump of the tongue was fixed up by a ligature passed through its base. The temperature reached 100·4° on the evening of the operation and 100·6° on the following day, and afterwards remained normal. The patient made a rapid recovery, and was discharged on the thirty-sixth day after the operation. Four months and a half later he was readmitted with recurrence in three glands, which were about the size of walnuts. There was one in each digastric triangle, and another at the anterior border of the right sterno-mastoid muscle at the level of the cricoid cartilage; these were removed, and the wounds were dressed with Listerian antiseptic dressings; on the right side the submaxillary gland and anterior belly of the digastric muscle were implicated, and were accordingly removed with the glands; the internal jugular vein was implicated by the growth in the neck, so it was clamped and tied above and below, and about an inch of the intervening portion was removed with the glands. The temperature reached 100·6° on the first and 101° on the second day after the operation, and afterwards remained normal. The patient made a rapid recovery, and was discharged on the fourteenth day after the operation. He was admitted again three months later with return of the growth in the floor of the mouth, in the lymphatic glands behind the right angle of the lower jaw, and in the right side of the neck, where there was a large tumour which had broken down in the centre and was suppurating; the abscess was opened, and the patient was temporarily relieved, but he died of exhaustion and bronchitis five weeks after his last admission to the hospital.

Remarks.—In the first case, that of cancer of the tongue and floor of the mouth, the operation, which was very extensive, was undertaken with the sole view of relieving pain and delaying the death of the patient by exhaustion. So far it was very successful, though as a means of ridding the patient of his disease it will in all probability prove ineffectual, notwithstanding that the whole of the sublingual tissues and lymphatic glands were removed. The ease with which, after division of the jaw, it was possible to perform such an extensive operation with a pair of scissors was worthy of note; the vessels were either clamped before division or at once picked up afterwards, and so there was very little loss of blood. In the second case of removal of the tongue the entire organ was removed through the mouth by the scissors, according to the plan advocated and so ably practised by Mr. Whitehead. In the case now recorded Mr. Hill extirpated the whole tongue with the greatest ease, and with but very slight loss of blood; and, provided the operator has a good assistant, it is difficult to understand the great and even fatal loss of blood which has occurred in, at least, one recorded case. This operation reduces excision of the tongue to the level of other major operations; the surgeon deliberately cuts away the whole of the diseased structures, and when he divides a vessel he treats it as in other situations by tension or ligature; the tissues are not bruised nearly so much as by the écraseur, and consequently there is much less sloughing on the surface of the stump, and less liability to septic infection afterwards. There is also less, in fact practically no, liability to secondary hæmorrhage after Whitehead's operation. During two years that Mr. Pollard was resident surgical officer to the Manchester Royal Infirmary, he witnessed the removal of many tongues with the scissors by Mr. Whitehead and his colleagues. In only one case was there hæmorrhage afterwards, which occurred from a small vessel which bled when the patient was recovering from the shock of the operation.

CITY OF LONDON INFIRMARY.

A RAPID CASE OF HYDROPHOBIA; NECROPSY; REMARKS.

(Under the care of Mr. W. GEM.)

MARY J——, aged fifty, was admitted into the infirmary on June 26th, 1885, suffering from "debility." On admission she complained of a slight catch in the breath, with pain over the ensiform cartilage. The heart's action was rapid and irregular, but no distinct murmur was audible. There were also crepitant râles over the base of the left lung, with dulness on percussion, suggesting that pulmonary mischief was developing. It was not until some hours after admission, when she refused to drink, making a peculiar bark-like noise on the saliva being forcibly ejected, that the following history was elicited from her. She was bitten by a large dog ten weeks ago, near Portland-road station, and treated for an angry wound of the back of the hand at one of the metropolitan hospitals as an out-patient for five weeks. The wound was entirely healed on her admission into the infirmary. She also stated that she had always been a hard drinker. The patient manifested the following symptoms between 4 A.M. and 2 P.M. on Saturday, June 27th (ten hours after admission). On the nurse going to give her medicine, she stated she could not swallow it lying down, but would take it standing up, which she did. A few hours later she tried to take some milk in the same manner, but could not do so on account of the spasms it produced. From that time the sputum became more viscid and more difficult to get up. She now complained of pain over the surface of the entire chest (which was relieved slightly by poulticing) and great catching in the breath, with acute hyperæsthesia of the whole body. She could not bear anyone to touch even the bedclothes; even asking her to drink or pouring out any fluids caused repeated spasms, which usually ended in spitting up very viscid sputum, with a wild expression of countenance, protruding eyeballs and anxious demeanour, which were painful to witness. Two or three hours before she succumbed she had three violent convulsions, producing complete opisthotonos, with great writhing of the whole body and foaming at the mouth, on recovering from which she stated that we were trying to smother and murder her; and on someone stating it was an interesting case to watch, she stated that she was not going to have her case recorded in a book for anyone, and that she would like to see the priest, as she knew she was going to die, clearly indicating that the mind was not in abeyance. The contortions of the body now became more frequent, the sputum more viscid, and the breathing greatly embarrassed. On account of her not being able to spit the mucus up, owing to its viscidity, she gradually sank and died, partly asphyxiated and partly comatosed from the exhaustion produced by the convulsions, twenty-four hours after admission.

A necropsy was made twenty-four hours after death, and revealed the following:—The meninges of the brain were slightly congested, but on tearing away the layers of the arachnoid from the longitudinal sinus there were patches of recent soft coagulated lymph. The brain itself appeared normal throughout, the meninges of the cord were greatly congested, and the medulla and upper part of the cord presented a great many vascular punctures on section. On opening the chest and pericardium there was pericarditis, with a lymphy exudation over the auricle and auricular appendix; the heart was normal. The lungs were greatly congested, more especially the left base; the larynx and trachea were congested and full of viscid mucus; the diaphragm was greatly congested at a point opposite the apex of the heart; the other organs of the body were normal to the naked eye, with no appearance of alcohol, to which she was supposed to have been addicted. The wound on the hand was perfectly cicatrised and normal in appearance. The treatment adopted was poulticing in the first stage, which gave her relief while persisted in; hypodermic injections of apomorphia, which seemed to have no effect on the spasms, were given; she also had enemata of brandy and opium, but without benefit.

Remarks.—The above case is of interest on account of the rapid course it ran and the total inability of the apomorphia and the enemata of opium to relieve in the slightest degree the violent spasms, showing the complete control the disease had over the nervous system. It is also of

interest on account of the complication of pericarditis, which is supposed to simulate the disease in some respects. Microscopical specimens could not be obtained.

LIVERPOOL ROYAL INFIRMARY.

A CASE OF DISLOCATION AND FRACTURE OF THE SPINE; EXTENSION; RECOVERY.

(Under the care of Mr. REGINALD HARRISON.)

C. R——, aged thirty, was admitted into the infirmary on Dec. 14th, 1884, having sustained an injury to the back due to a fall down a railway cutting, a distance of seventy-five feet. On examination there was a swelling over the third lumbar vertebra. The vertebral spines could be traced from above downwards as far as the third lumbar vertebra, the spine of which was very prominent; below this there was a depression, the fourth lumbar vertebra not being within reach, and below this the fifth lumbar vertebra could be distinctly felt. There was no crepitus. The lower limbs were completely paralysed, and sensation was absent up to an ill-defined line at the upper part of the thighs. She complained of great pain in the back and down the legs. There were retention of urine and incontinence of fæces.

An anæsthetic having been administered, the shoulders were fixed and a broad strap was placed around the pelvis, from which extension was made by means of pulleys. During the operation the patient lay on her back, and gentle pressure was made over the third lumbar vertebra. This was felt distinctly to go back, and at the same time the fourth vertebra slipped into its position. A saddle-shaped splint being fixed on the back, she was removed to bed.

On examination the next morning the pain in the back and legs was absent; she could lift her right leg a few inches off the bed and move her left leg slightly. Sensation had returned to a great extent, especially in the right leg. There was no retention of urine or incontinence of fæces.

From this time the patient got gradually better without any bad symptoms, the muscular power and sensation in the right leg always being in slight advance over those of the left. The temperature was never higher than 100° F. The prominence in the lumbar region returned to a slight extent. She was kept in bed lying on her back with her legs extended until March 10th, 1885, when a plaster-of-Paris jacket was put on; and on March 12th she got up for the first time. She was very weak, but quickly improved, and on April 28th, 1885, was discharged, being able to walk about and do light work with perfect ease.

Medical Societies.

OBSTETRICAL SOCIETY OF LONDON.

A MEETING of this Society was held on the 1st inst., Dr. J. B. Potter, F.R.C.P., in the chair.

The following specimens were shown:—Rupture of the Fundus Uteri during Pregnancy, by Dr. Harvey (Calcutta); Malignant Dermoid Ovarian Cyst, by Mr. Thornton; Atrophy of the Chorion, by Dr. Herman.

Dr. PRIESTLEY read notes of a visit to some of the lying-in hospitals in the north of Europe, and particularly on the advantages of the Antiseptic System in Obstetric Practice. The hospitals visited were those at Copenhagen, Helsingfors, and St. Petersburg. At Copenhagen the new *régime* began in 1870. In the Maternity Hospital, in the fifteen years from 1850 to 1864 the mortality was 1 in 24; between 1822 and 1843 it had been 1 in 19—i.e., only slightly lower than the mortality in the Nightingale Charity of King's College Hospital, which compelled the author to close the ward. From 1865 to to 1874 the mortality from puerperal fever was 1 in 51; from 1870 to 1874 it was 1 in 87, the improvement coinciding with increasing strictness in antiseptic precautions. The hospital is constructed in the most elaborate and expensive way, to secure hygienic perfection, including ventilation, isolation of each part of the building if desirable, and even a separate room for each patient; moreover, the rooms are only used alternately, which is equivalent to halving the number of beds. The attendants are under strict rules of periodical purification, and are not allowed to pass directly from the convalescent to the lying-in wards. If a patient has been ill, the nurse is fumigated with sulphurous acid gas by an elaborate process. The same is used for disinfection of the rooms. The personal precautions include careful antiseptic hand-washing, soaking of catheters, &c.; no sponges are used; and the vagina is injected twice a day with carbolic acid lotion. The beds are of canvas, filled with chopped straw, which is destroyed after use. Each bed has its own basins, syringes, catheters, &c. The placenta and dressings are burnt. On suspicion of infection the patient is isolated, and admissions suspended to that part of the hospital. The medical officers are not allowed to attend autopsies. The director lives in the hospital, of which he is absolute master. As in other hospitals, there is an undue proportion of difficult cases and primiparæ, and the primiparæ have a large share in the mortality. The midwives of Denmark are compelled to use antiseptic precautions, and this has sensibly reduced the mortality. At Helsingfors the hospital is arranged on the pavilion system, one block being devoted to diseases of women, including wards for operations and rooms for out-patients. The wards for lying-in cases contained about forty-two beds; the beds were in the middle of the rooms. The mattresses were sacks of fresh rye straw for the non-paying patients, and of horsehair or bark of the lime-tree for paying patients, all being cleaned, baked, and re-made for each new patient. Some patients lay on the bare boards of the bottom of the bed, as is usual in Finland. Antiseptics were not as minutely carried out here. Midwives and nurses were made to wash their hands and arms with soap, and afterwards to rub them with dry hypochlorite of lime before examinations. Abnormal cases were isolated. The medical officers were forbidden to attend autopsies or to touch infectious wounds without taking antiseptic precautions afterwards. Catheters were carbolised, and the wards periodically closed and cleaned. After labour a single injection of carbolic acid was given, and oftener when specially indicated. The linen was simply washed; the blankets were fumigated by burning sulphur. Professor Pippinsköld trusts largely to the excellent hygiene of the hospital (built on a rock high above the town) and to the clean habits of the people; but the external genitals are always washed before delivery, to guard against external morbific influences, more minute care being thought unnecessary under the circumstances. Before the new maternity was opened in 1879 the total mortality averaged 1·83 per cent. From 1879 to 1884 the total mortality was 1 per cent. At St. Petersburg (the Grand Duchess Catharine Maternity Hospital) there were arrangements for isolating the various parts. Scrupulous cleanliness, the disinfection of rooms, concrete floors, draining into a central gully, and the careful use of antiseptics are included in the system. In the last three years there had only been one death from puerperal fever, though six from other causes.—Dr. MATTHEWS DUNCAN said that the subject of antiseptics in midwifery was the most important in the whole obstetric department, but it got very little attention. The subject was greater than the prevention of epidemics, which came occasionally, while puerperal deaths were constantly occurring in the most valuable members of the community. The value of antiseptics in midwifery had only lately been estimated, because it was but recently that the profession had agreed as to the mortality of childbed. Some men had their thousands of cases without a death, and while he did not doubt their veracity he did not accept their statements. No man could claim immunity from deformed pelves, placenta prævia, puerperal convulsions, phlegmasia dolens, puerperal inflammations, puerperal scarlatina, puerperal septicæmia, or puerperal insanity. Farr began by ridiculing the demonstrated puerperal mortality, but he eventually nearly accepted the received view—that about 1 in 120 die in childbed or within a few weeks after delivery. In the history of the subject all measures had failed to reduce mortality till antiseptics were introduced. Abroad the great mass of women were attended by midwives, who were compelled by law to use antiseptics. In Great Britain most were attended by doctors, very few of whom used antiseptics. He hoped they would be universally adopted.—Dr. JOHN WILLIAMS said that we should keep clearly in our minds that we cannot abolish by antiseptics the effects of pregnancy and labour, but we may hope to abolish deaths from puerperal fever. The mortality of the St. Petersburg Hospital (one death from puerperal fever in three years) was a near approach to

this. The results at Copenhagen and Helsingfors are little better than those in the Rotunda, Dublin, before antiseptics were used. During seven years of office Collins admitted about 16,000 women, had two epidemics of puerperal fever, in which about 80 died, and the total mortality was 1 per cent. Dr. Macan, the present master, admitted during his first year of office 1090, and of these six died, two at least from other causes than septicæmia. This excellent result has been obtained by careful antiseptic precautions. Dr. McClintock calculated that a quarter of the deaths in childbed were not due to parturition or puerperal fever. Taking the deaths in childbed at 1 per cent., the lowest mortality, after the destruction of puerperal fever, would be ¼ per cent., or 2·2 per 1000, and our object should be to reduce our mortality to this level. This, he believed, might be attained by antiseptics. This was the object of Dr. Champneys and himself at the General Lying-in Hospital, but the object had not been obtained. During the first four years there were 7 deaths in 1174, or a little more than ½ per cent. During the first twelve or eighteen months carbolic acid was used, during a second similar period permanganate of potash, and since May, 1884, corrosive sublimate. During the first two periods there was a good deal of illness, though the mortality was low. Since the use of corrosive sublimate was begun there have been no deaths from puerperal fever, and almost an entire absence of morbidity. The mortality mentioned is the total mortality, for all cases which were not well at the time of their discharge from the hospital were admitted into St. George's Hospital under Dr. Champneys, or into University College Hospital under Dr. Williams, and the result was incorporated with the statistics of the General Lying-in Hospital.—Dr. CHAMPNEYS said that the total mortality from all causes in the General Lying-in Hospital in the last four years and a half, since Dr. Williams and he had had charge of it, was 9 in 1360—that is, 1 in 151, or ·66 per cent. The last two deaths were from phthisis, with which the patients were practically moribund on admission. These results are decidedly good at the present time, though it is hoped to improve them in the future. The greatest care is taken to follow up the cases; on discharge each patient is furnished with a postcard directed to the hospital, on which she is requested to write her state and that of the infant about a month after her discharge, or six weeks from her confinement. No statistics of lying-in hospitals are trustworthy which do not give the total mortality from all causes, and which do not state that no patient was transferred to another hospital, or that, if transferred, her progress was ascertained. The statement that no deaths occurred from puerperal fever is worthless in the absence of the whole mortality; and, indeed, all cases dying after childbirth are presumably, or in the absence of distinct proof to the contrary, cases of puerperal fever, and such cases often give unmistakable though unexpected evidence of septic processes after death. Thus, the statement that in the St. Petersburg Hospital there had only been one death from puerperal fever in three years, while there had been six deaths from other causes, does not carry conviction. This is certainly a most unusual proportion, What were the causes of the other six deaths? The triumphs of antiseptics had been greatest in the most filthy localities; where cleanliness and general hygiene had been attended to, the benefit, though undoubted, was less striking. Antiseptic teaching should be as clear and as definite as possible. If details were unnecessarily multiplied, nurses, and even practitioners, were liable to confuse the essentials with non-essentials, and even to throw the whole thing overboard. He found no difficulty in carrying out the same details in private as in hospital. The all-important thing is scrupulous antiseptic cleanliness of the hands. On this he insisted on the part of the nurses, as well as on his own; and inspection of the nails and skin of the hands of nurses was important on this account.—Dr. WEST thought that the teachers of midwifery, or, better still, the Obstetrical Society, should pronounce definitely as to what was essential in antiseptic treatment. In Vienna frequent vaginal washing and the introduction of iodoform into the uterine cavity formed part of the system. Women would, he thought, be apt to dislike this interference, and it would also suggest to them the great danger which there must be to necessitate it.—Dr. PLAYFAIR was sure that in private not one man in a hundred used antiseptics in any thorough way. There were none of the difficulties which Dr. West had imagined, and in his own practice antiseptics were as rigidly enforced as it was possible. Absolute surgical asepticism was, of course, impossible. He now supplied his nurses with antiseptic rules printed on a card, the chief rules being that the nurse should never touch the neighbourhood of the genitals without careful antiseptic washing of the hands. The same precaution was taken with regard to all sponges, catheters, &c. Corrosive sublimate was preferred to carbolic acid. These rules were even more important for nurses and midwives, who often touched the genitals, than for medical men, who as a rule only do so during labour. Nurses were apt to be careless of details and of cleanliness, and the result was visited on the medical man. He hoped that antiseptics would soon be the routine practice, and he was sure the result would be most satisfactory.—Dr. GIBBONS remarked on the common practice of pouring a few drops of antiseptic solution into an unmeasured quantity of water, which was useless.—Dr. MURPHY (Sunderland) regretted that the discussion had not included the details of the antiseptic treatment recommended. He asked the opinion of the Society as to the justifiability of attending a case of labour shortly after having examined a case of puerperal fever in consultation. The text-books say that practice must be given up for several months. Dr. Murphy thought that change of clothes and a warm carbolic bath (1 in 100) for half an hour gave sufficient security.—Dr. BRAXTON HICKS agreed with Dr. Matthews Duncan as to the value of antiseptics in midwifery, but not as to his estimate of puerperal mortality. He had in ten years of early practice some 800 to 1000 cases, and only one death, which was from puerperal fever. Morbidity was as important as mortality. He referred to the injurious effects of human lochia inoculated into rabbits, as showing their poisonous character. The antiseptic vaseline or oil was of little importance compared with antiseptic cleanliness of the hands.—Dr. HARVEY said that in Calcutta for many years carbolised oil had been used for vaginal examinations, and that vaginal injections of carbolic acid or corrosive sublimate were used if any fetor was noticed in the discharges; when there was pyrexia besides, the uterus was washed out. Good had resulted; but the mortality in Calcutta would always be high, as patients were often admitted after many hours of labour and after the establishment of septicæmia.—Dr. PRESTLEY, in reply, congratulated Dr. Williams and Dr. Champneys on the results obtained by them, and said that he was informed by Dr. Grigg that of 1100 deliveries in Queen Charlotte's Hospital, between February 14th, 1884, and July 1st, 1885, there had only been one death, and that was from puerperal convulsions. He agreed with Dr. West as to the desirability of defining what amount of antiseptics was necessary, and he doubted if autogenetic infection existed. Antiseptic cleanliness of all things touching the genitals was very important, and vaginal injections had better be retained meanwhile.

ACADEMY OF MEDICINE IN IRELAND.

AT a meeting of the Medical Section on May 1st, Dr. JAMES LITTLE detailed thirteen cases of Pneumonia which he had seen in private during the past winter. Of these eight had proved fatal; and the author drew attention to the frequency with which pneumonia, as at present epidemic, was accompanied by grave complications. He then invited discussion on the treatment of the disease, and specially on the question whether quinine exercised any beneficial influence.—Dr. J. W. MOORE, discussing the etiology of the disease from his experience at Cork-street Fever Hospital, considered the treatment of acute pneumonia was very little more within the grasp of the physician than the treatment either of typhus fever or of enteric fever. Statistics indicated that acute pneumonia had been very prevalent in Dublin, and, as Dr. Little had observed, the mortality of the present epidemic was exceedingly high. Thus, of 101 cases treated in Cork-street Hospital during the twelve months ending March 31st, 1885, twenty-four died, or very nearly 24 per cent. Another feature of interest was the very remarkable correlation between acute pneumonia and enteric fever. During the winter he saw three cases in which the diagnosis of croupous pneumonia was unequivocal, and yet when the time for resolution of the lung came the fever ran on and the cases turned out to be typical instances of enteric fever, with rose spots, &c. In his opinion acute pneumonia was an essential or specific fever, analogous in its origin to enteric fever.—Dr. FITZPATRICK recollected, half a century ago, seeing cases in the

Meath Hospital treated by the late Dr. Stokes with tartar emetic. In Edinburgh, at the same period, the treatment was on a different principle, consisting of small doses of calomel, opium, leeching, and cupping. He had himself had under treatment four cases of croupous pneumonia among the children of one family. His treatment comprised chlorate of potash and bark, and blisters; indeed, he attached the greatest importance to blistering as a most efficacious remedy.—Dr. DUFFEY considered that physicians were much too chary in giving opium in pulmonary disease. There was a prejudice against it, but any bad results could be averted or kept in check by careful observation of its effects. He had seen good results follow the careful and regular administration of opium in cases of croupous pneumonia. Given hypodermically, the pain of pleurisy (which was generally associated with pleuro-pneumonia) was relieved. He had himself been in the habit of using ergot combined with opium. Ergot was a powerful cardiac depressant, besides constricting the bloodvessels. Therefore, in a disease like pneumonia, in which there was a large quantity of blood in the lungs, it diminished the amount going through the pulmonary vessels.—Dr. HENRY KENNEDY placed reliance on mercury, with which he had treated a number of cases, giving small doses—commonly the blue pill, sometimes even the bichloride of mercury. He had great faith in blistering pneumonic cases; but to be of service the blister should not be an insignificant four-inch one, but the size, say, of a page of foolscap paper. That hint he took from Sir Henry Marsh, who said, "If you want to do any good, apply a large blister." Poultices were, in his opinion, quite secondary to other treatment.—Dr. MORE MADDEN observed that in the Hospital for Sick Children pneumonia was one of the most common diseases. Within the last few months pneumonia had been unusually prevalent and peculiarly fatal in its character. In one instance he had two, and in another three, members of the same family suffering from pneumonia—a fact worthy of observation in connexion with the epidemic form of pneumonia. Speaking from his fourteen years' experience of pneumonia in that hospital, the different forms of pneumonia occurring in different years required different treatment. He could not agree as to the inefficacy of medicine in all febrile diseases. His opinion was that, while fever could not be cut short, it might be guided to a safe termination by medical treatment. He believed in the antiphlogistic power of mercury, and had he the disease himself he would like to be wrapped up in poultices and to be given mercury, quinine, and stimulants.—The REGISTRAR-GENERAL said that the cases of pneumonia spoken of by the present speakers were of a more severe character than those with which he was familiar. Some years ago he came to the conclusion that pneumonia was essentially a fever, and that too an infective fever.—Mr. ORMSBY said he had performed venesection in a case of croupous pneumonia with good results.—Dr. HAWTREY BENSON had treated cases with quinine, stimulants, poultices, and blisters.—Dr. FINNY said he had never seen so many cases of pneumonia as within the last six months, and it was different from the pneumonia of former years. A great amount of lung tissue became involved. In ordinary pneumonia the fever ran to a high pitch, the crisis taking place about the eighth day. But in the present epidemic the temperature rarely passed 103°, or from 103° to 104°, and the crisis occurred about the fifth day. Another point of interest was that the disease spread from one lung to another, pleurisy being very common. Acute delirium, such as was seen in typhus, was also a common symptom of the disease. Amongst the physical signs of pneumonia one frequently present was the tympanitic resonant note above the attacked portion of the lung, and this was followed by extension of the disease. The treatment he adopted was exactly the same as for a severe fever. He treated the patient and not the disease. Adapting the treatment to the suffering of the patient, he gave quinine in moderate doses and morphia or opium internally, and local relief by cupping and poulticing. Stimulants were also necessary. His attention was also directed to strengthening the heart and inducing sleep.—Mr. DOYLE said he had in all cases for the last three or four years been in the habit of using local lukewarm packing, which he found relieved the pain quite as effectively as ice-packing did. He would give large doses of quinine once in the twenty-four hours to bring down the temperature. In treating pneumonia the fever must be treated.—The PRESIDENT concurred as to the fatality of pneumonia in the present epidemic, especially once the meridian of life was passed. He believed that quinine was one of the drugs—perhaps the only drug—which in a vast proportion of cases enabled the physician to overtake the disease or enabled the patient to live till the disease subsided. He had seen valuable results from blisters in moderation, and at the stage when the temperature came down and resolution was hanging fire—just about the same time that one would use mercury and iodide of potassium. On the other hand, he had seen evil and even fatal results ensue from the application of very large blisters in pneumonia. Feeding and stimulants must occupy a prominent place in treating such cases.—Dr. LITTLE, in replying, was sure that the President was correct in saying that a great number of cases of pneumonia were those of old-standing renal disease, and for years past he had himself regarded death as a foregone conclusion in cases of patients attacked with chronic Bright's disease. He could speak in the most confident way as to the value of packing of the chest in croupous or lobar pneumonia. As to blistering, his opinion was in accord with that of the President. Hypodermic injections of morphia, when the patient was in a state of dyspnœa with intense pain, induced sleep, and contributed to recovery. There were other ways of securing sleep, stopping nervous disturbance, and averting the tendency to death; but with regard to their affecting the disease he was in doubt. He had himself been persuaded by a medical friend to try ergot, but he never saw any good effect from it. For his own part, he had at the outset faith in quinine, then he began to lose it, and now his faith was coming back because in the practice of other physicians the cases did well where the quinine was fairly administered.

Reviews and Notices of Books.

The Curability and Treatment of Pulmonary Phthisis. By S. JACCOUD, Professor of Medical Pathology to the Faculty of Paris. Translated and Edited by MONTAGU LUBBOCK, M.D., M.R.C.P. London: Kegan Paul, Trench, and Co. 1885.

THE more hopeful attitude towards consumption at the present day, as compared with that held a generation ago, finds ample illustration in M. Jaccoud's work. It is needless to say that his writing is based upon strictly scientific and rational grounds, and that he does not promise more than facts warrant. In spite of the fact that tuberculosis probably underlies all cases of genuine phthisis, there has been no reversion to the old pessimistic opinion of its incurable character, but rather an impetus has been given to attempts to successfully cope with a malady the true nature of which is becoming better known. The prevalence of more rational views about the way to deal with consumptives has done much, at any rate, to prolong the duration of life among them, without perhaps greatly affecting the rate of mortality. Still, the precepts laid down in such a work as this, and in Dr. Weber's recent Croonian Lectures, will throw much light on the directions in which treatment may offer the best hope of a relative, if not an absolute, success. We quite concur with M. Jaccoud when he urges that where absolute recovery is out of the question every effort should be made to place the patient in such conditions that "he can live notwithstanding lesions which are now irreparable. . . . The enemy *can* be conquered: this is the idea which should engender and sustain every effort. It is certain that this conviction is the first condition of success, since it is absence of faith in the possibility of cure which prevents the adoption of all therapeutic treatment" (p. 28). We might, we fear, add to this that too often the patient, holding a conviction that cannot be shared by his medical adviser, seeks for a vaunted specific or "infallible cure" which has no influence at all in checking the downward progress of the disease. It is right to have hope so long as there are adequate grounds for it, but it rests with the physician to determine whether such grounds exist or not.

In this determination, and in the line of treatment that is most suitable for varying types and stages of the malady, much assistance will be derived from a careful study of M. Jaccoud's work. We may fail to grasp some of the distinctions he has thought fit to create between so-called "innate" (as distinguished from hereditary) and "acquired" phthisis, or some of the subdivisions of greater subtlety, which are, he avers, of importance in a prognostic point of view; but, on the whole, no one can carefully read through this book without being instructed by it. Naturally some consideration is given to the question of prophylactic treatment, the prosecution of which may have to be commenced in infancy and pursued throughout life. Of especial value are hygienic measures, abundant fresh air, pulmonary exercises — "aero-therapeutics" — being advocated. Then follows the extended discussion of all the measures, hygienic, dietetic, and medicinal, which may be called for in the treatment of the declared disease in its various stages and with its several complications; separate and more detailed consideration being given to the subject of treatment by mineral waters and climate. M. Jaccoud speaks with authority upon these subjects; and the profession of this country will be indebted to Dr. Lubbock for having given them the opportunity of studying his views. Not that there is any new revelation to be found in the book. The doctrines are those which are being put into daily practice by all physicians who have arrived at rational ideas upon the nature of phthisis; but none the less is it necessary that they should be widely promulgated, for in their adoption there is hope of greater benefit being given to those who form so large a proportion of the sick community.

Elementary Text-book of Zoology. General Part and Special Part—Protozoa to Insecta. By Dr. C. CLAUS, Professor of Zoology in the University of Vienna. Translated and Edited by ADAM SEDGWICK, M.A., assisted by F. G. HEATHCOTE. With 706 Woodcuts. Pp. 615. London: W. Swan Sonnenschien and Co. 1884.

WE are glad to see this excellent text-book in an English dress. The name of the principal editor is a sufficient guarantee that it has been well translated, and we may add that in the numerous passages which we have collated with the original, we have found the German text very faithfully as well as elegantly rendered into English. The general get-up of the book, in regard to paper, type, and in the clearness of the printing of the very numerous woodcuts which adorn and illustrate the text, reflects great credit on the publishers.

We have comparatively few good and complete works on zoology. V. der Hoeven's treatise (now behind the time), Professor Owen's Comparative Anatomy (also out of date), Mr. Huxley's small but very full and accurate Comparative Anatomy, and Gegenbauer's and Mr. MacAlister's compact and wonderfully condensed treatises are the chief works that can be put into the hands of a student. We have nothing that can be compared with the splendid but too tardily proceeding classic of Brown, which is a mine of knowledge both in regard to comparative anatomy and zoology; whilst in v. Carus's treatise on Zoology, in Schmarda, and in v. Hayek the German student finds all recent knowledge well worked up. The value of Dr. Claus's work has been recognised in France, and a valuable translation has been made by M. G. Moquin-Tandon, the learned Professor of Zoology to the Faculty of Sciences at Besançon. The French translation has received considerable additions from the pen of M. Moquin-Tandon himself. The term "Text-book of Zoology" might at first sight be thought to imply that only the external forms, the classification, habits, and instincts of the chief types of animal life would be described; but in the work before us it has a far wider meaning, for it embraces the anatomy of the adult form, a fairly complete account of the development of the embryo, and the life history of nearly all the principal groups. The introductory General Part is occupied with an account of the several functions, as those of circulation, respiration, secretion, and the like, without entering into details; indeed, it appears to us that this part of the book might with advantage have been extended. The chapters devoted to Development contain very clear and intelligible accounts of metagenesis, polymorphism, and heterogamy; whilst the fifth chapter is occupied almost exclusively with the theory of Evolution, in which it is easy to see the author is an earnest believer.

Tratado Iconográfico de las Enfermedades Externas del Organo de la Visión. Por el Dr. JUAN GELPI Y JOFRE. Evaristo Ullastres. Fol. Barcelona, 1885.

THIS is a handsome volume, and we have much pleasure in welcoming any contribution from Spain that indicates that her *savans* are beginning to utilise the large fields of scientific observation lying at their feet. Whether it is that really only a few works are published on medical science in Spain, or whether those that are of value are translated in France, and only come to us in the guise of that tongue, it is difficult to determine, but it is not the less true that we receive for review scores of German and French works for one in the Spanish language. The treatise before us is properly an atlas of the diseases of the external parts of the eye, with a short account of their nature and treatment. There are no drawings illustrating the ophthalmoscopic appearances in disease. The number of plates is twenty, and of the drawings 108. The letter-press runs to 140 folio pages. The lithographs are bold, and a little larger than life size. Their defect is that they are coarsely drawn, and even making allowance for the darker tints of the races of Southern Europe, the colours are too vivid. M. Miralles, whose name appears as lithographer at the foot of the plates, should have given an extra, or in some instances, as in the drawing representing epithelioma of the caruncle, two or three extra or intermediate tints, and the glaring contrasts of colour would have been materially reduced. The bloodvessels which run on the sclerotica and in the conjunctiva are finely branched in almost all cases except those of chronic glaucoma, of which disease they constitute a striking feature. Yet in many instances in these drawings only two or three divisions are given, and they appear in consequence to end suddenly and coarsely. A large amount of colour as well as space is wasted in drawing the adjuncts of the eye, as the eyelashes and eyelids, when the part really meant to be designed is the cornea or iris. In reading the text of some of the principal articles we have been impressed with the plain and simple manner in which the several subjects are discussed, the latest views being given without any pretence at exhaustive bibliography or special quoting of authorities. Thus, for example, under the head of Sympathetic Ophthalmia, M. Jofre refers especially to the two forms which it may present of serous and plastic iridochoroiditis, the latter being far the more common, and describes the incipient or prodromic symptoms, the inflammatory period, and finally the egressive period.

Elements of Surgical Pathology. By AUGUSTUS J. PEPPER, M.S., M.B., F.R.C.S., Surgeon to St. Mary's Hospital, &c. Illustrated with 84 Engravings. Second Edition. London: Cassell and Co.

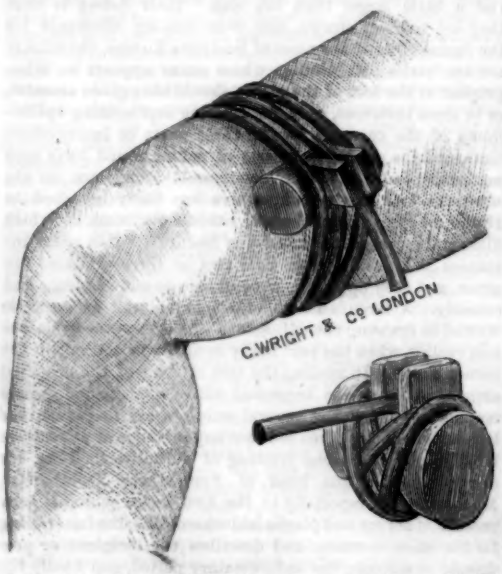
A NEW edition of this deservedly popular book will be welcomed by the students of English-speaking medical schools. Happily the author has resisted the temptation to enlarge his work to any extent, and the book still preserves its original convenient size. There has been careful revision throughout, and some chapters, such as those on inflammation and deformities, have been rewritten. New sections

have been added on spondylolisthesis, scurvy, rickets, fœtal rickets, progressive obliterative arteritis, and Raynaud's disease. In the account of the last affection we miss any reference to the intermittent hæmatinuria which has been observed in some of the recorded cases, and appears to be distinctly associated with the affection. In an appendix we have a short description of Strasburger's views of indirect cell multiplication illustrated by Ziegler's diagrams of cells in various stages of this process. This book has already commended itself so fully to students that it needs no recommendation from us, and we have only to congratulate Mr. Pepper upon his success and upon the improvements he has introduced into this edition.

New Inventions.

AN IMPROVED TOURNIQUET.

As considerable inconvenience has resulted to surgeons and dressers from the want of a good compressor and an easily-acting clip for the fixing or freeing of the elastic cord, I have recently introduced the following plan of a tourniquet for general use in the Westminster and other operating theatres. The subjoined drawing illustrates the tourniquet, as well as its application over the femoral artery. The elastic cord is fixed in the **T**-shaped compressor by a concealed bullet in the cord, which prevents the cord pulling out one way only, but allows the cord to be withdrawn for purposes of cleanliness through a round hole at the base



of the slot. This slot is cut deep in the handle of the **T**, and the cord in a state of tension is most readily fixed or liberated, the act of letting the elastic cord go in the slot being sufficient to make it secure. The cord may be used either as a one-ended or double band. By allowing the elastic cord to wind over the arms of the **T**, the compressor is nicely fixed for the use of the slot. This mechanism can be adjusted so tenderly that I have used a very small one for combating the nuisance of incontinence of urine, by applying the compressor under the urethra and the cord (doubly clipped) around the penis.

Messrs. Wright and Co., of 108, New Bond-street, W., are the makers. Although in amputations the skilled thumbs of an assistant may be very good, yet I venture to think that the utility of this mechanical arrangement may be proved in urgent and not infrequent occasions.

RICHARD DAVY, M.B., F.R.S.E.,
Surgeon to the Westminster Hospital.
Welbeck-street, Cavendish-square, W.

TOZER'S AMBULANCE STRETCHER.

MR. TOZER, Chief Superintendent of the Birmingham Fire Brigade, has devised a new form of ambulance stretcher for the removal of injured persons, which promises to be very useful, and at the same time convenient. The apparatus is

exceedingly simple—so much so as scarcely to need explanation, since the larger scaled section shows the method of opening and closing. The apparatus is inexpensive, and would be found serviceable in hospitals, police and fire brigade stations. The manufacturers are Messrs. Salt and Son, Corporation-street, Birmingham.

"THE MIND."

To the Editor of THE LANCET.

SIR,—In the appreciative and discriminating notice of my lecture on the Human Mind there is, I think, one point on which you rather misapprehended my meaning—namely, in reference to the doctrine of heredity: whether I am right in thinking this is a matter of small importance. But as heredity is a question which occupies the public mind a good deal, and is really one of great importance, I trust I shall not be considered presumptuous in putting briefly before your readers (who are many of them far better instructed than I am with regard to the physiological aspect of the subject) what I really do mean. I agree with you in thinking that probably "when any species of organised matter reproduces its kind, the form in which it is cast is as much part of the inheritance as the matter itself, and it is on this form character and quality depend"; and also that "the education thus reproduced.....is the recorded *result* of function." I do not, however, quite like the word "recorded," inasmuch as it seems to imply (but perhaps I am wrong in supposing this) a memory of past occurrences, and I do not see that anything of this kind is innate. For example, I should say that the progeny of an educated pointer is born probably with a greater capability of doing its work than a pointer not thus educated; but I do not believe that it is born with any *knowledge* of fields, partridges, &c. I think that, when put in this light, you would not probably differ from my view. I venture to make these remarks, as I think that the more *accurately* we can bring before our minds the real nature of what we mean by an "educated" faculty in connexion with heredity, the more likely we are to get before us a clear issue, and to obtain valuable information on the subject.

I am, Sir, yours faithfully,
Castle-hill, Ealing, July 9th, 1885. S. J. JERRAM.

THE LANCET.

LONDON: SATURDAY, JULY 18, 1885.

OUR public men seem determined to show that if they have little power to mitigate the deep economic distress of the country, they have great ability in multiplying its pauperism and in removing the safeguards which keep men from it. The demoralising effect of the experiment of trying to govern the country by a minority is painfully apparent in the course which is being taken in various questions, but in none more strikingly than in that with reference to medical relief and disqualification. The Conservative Government does almost exactly the same as the Liberal Government, and sometimes exceeds it—out-Herods Herod. At present no person in a city or borough who within twelve months has received parochial relief or alms can vote. We are threatened with a Bill to make the receipt of medical relief no bar to the exercise of political privilege. This Bill is introduced, not by a Radical below the gangway, but by the Conservative Government. Henceforth a pauper is to be as good as any other man, and something better. That is, he is to be the favoured *protégé* of the State, and yet to exercise full political privileges except that of voting for the guardians who kindly make his allowance. We have already guarded ourselves against possible misconstruction on this question by expressing the deepest sympathy with the poor, and the greatest respect for those who, though poor, contrive to maintain their independence. The more their poverty, the more their credit; and so long as the humblest labourer contrives to maintain himself and his family by his own and their labour in sickness and in health we think he is entitled to political privileges. He may not be very wise or well informed, but he is nobly struggling with the problem of existence, and doing well under difficult circumstances. He has something to teach even a wealthy nation—namely, to live within its resources; and his views are entitled to expression and representation, even if they are wrong. But to make the pauper and the independent labourer alike is not good for either. It is not good for the pauper because it removes an inducement for him to escape from the disabilities of pauperism, and to put himself on the footing of an independent working-man. It is not good for the independent workman, for it suggests to him that he will be of equal account in the State whether he depends on himself or falls helplessly into the arms of the State. We do not see where this is to end. If the out-door pauper is to be a voter, why not the in-door? The theory at the root of this novel legislation is that pauperism is a misfortune; whether a man be an in-door or out-door pauper is a mere question of accident or of degree. Hitherto we have been accustomed to think that, with many honourable and painful exceptions, pauperism was, whether a misfortune or not, often a discredit, and not unfrequently the consequence of a man's own faults. Be this as it may, we want to know how men who are unable to manage their own affairs are going to help to manage the affairs of the country. Our contention is that nowadays, with a little thrift and sobriety, even agricultural labourers can have their sick clubs and be independent of the parish for medical relief, and that the legislation with which we are threatened removes a great inducement to men to exercise this slight thrift and sobriety. We complain that, just at the moment when the labouring classes need a strong reminder by the State that they should cultivate providence in medical matters, the State is not going to give this reminder, but actually to aim a blow at the sounder notions which are springing up everywhere and most beneficially in the minds of the working classes. We protest against such miserable legislation as this, whether promoted by Liberals or Conservatives. It is *ad captandum* legislation, and not likely to do any good. It is not legislation on the lines that have made us as a nation what we are. It is pauperising legislation. And the least reflecting man must ask himself where it is going to end. If education, and medicine, and food are to be given to men without loss of political status, we shall be apt to become a nation of paupers, in which every man relies upon the State in sickness and in health, instead of relying on himself. The medical profession has deep reason to be dissatisfied with the Government for its Medical Relief Disqualification Bill. We are glad that this demoralising measure is to be opposed by Mr. COURTNEY, Mr. CLARE READ, and others. We entreat the support of members on all sides of the House who think more of the people than they do of the votes of the vulgar.

THE medical profession, from its numerous connexions with science and practice of other kinds, demands of its members almost more than any other calling a mind habituated to view any subject or question with which it has to deal in a continuous and comprehensive manner. It necessarily follows that the technical studies involved in it must each be cultivated within the bounds of reasonable time, in its length, breadth, and depth, its practice and theory, and that the student's intellect, in order to do this, must have gained expansion and agility by a habit of mental application acquired in the stages of general preliminary instruction. The foregoing remarks are only in accord with received ideas of thoroughness in education. They will be endorsed, we do not doubt, by the experience of every practitioner. They may also be said to summarise the *rationale* of a brochure by Mr. LAFFAN of Cashel, on the subject of medical training. This gentleman complains, not without reason, that there are grave shortcomings in our present system of secondary education. It is in many schools too unequal, and is overweighted at the classical end. He advises that more time should be given to mathematics, English, physics, and modern languages, and especially that examinations and cramming should be largely dispensed with in favour of more moderate measures and tests which would train and bring out rather the culture average of the many than the proficiency of a brilliant few. The influence of such arrangements on candidates for the medical profession, he expects would be such as to make the passing of such a preliminary examination as that of the London Degree in Medicine, an object requiring but little additional or special effort. This level he would fix as one to be arrived at by all students before admission to medical study. A degree in Arts taken at a

University, or satisfactory proof of careful study directed on the same lines at a school during three or four years, would necessarily cover the necessity for a special entrance examination. With these recommendations we heartily agree. Nothing is more important than that the intending medical student should approach the proper studies of his calling at an age and at a stage of thought when his faculties have been consolidated by pressure of work and are able to grapple earnestly and hopefully with that body of knowledge on which alone he must rely for success in after-life. Much would be gained, we believe, in the actual result of medical work, if the age at which the professional curriculum should begin were fixed at twenty or twenty-one years. The time previously spent in arts and physical science would be by no means wasted. With respect to the qualifying entrance examination itself, an innovation for the relief of pressure might be very suitably introduced by making it possible for candidates to pass in the preliminary subjects on two separate occasions, each implying equal, or nearly equal, sections of study. Thoroughness and depth might thus be gained without contraction of surface; and it would be fairly possible to raise the standard of marks and of implied proficiency required for even the London degree above its present rather low level. As we go on to the curriculum of medical study itself other considerations present themselves. We need hardly fear that in colleges or hospitals of established reputation the theory of our art will suffer serious damage from neglect in teaching. There is plenty of theory, sometimes too much; but the practical side, from want of time or material for instruction, or from the student's thirst for honours, is often apt to sink out of sight. In no department of his work can the medical student afford to be unpractical, and least of all in acquainting himself with the actual details of medical and surgical treatment. As a means of fortifying him in his grasp of these essentials, Mr. LAFFAN and others with him have suggested a revival of the system of apprenticeship with a practitioner. They would have the apprentice form this early connexion with his future work in the year or so immediately preceding his entrance on systematic medical study. Compounding drugs and minor practice of different kinds would constitute the work of this period, during which a steady habit of life would also be formed, and the ice broken for future progress by elementary readings in anatomy, pharmacy, or other subjects. The plan might prove practically successful if committed to conscientious hands. It is, however, we think, more comprehensive than at first sight appears, and is capable of greater development than it would attain to if simply revived on the old basis without some definite regulation as to kind and quantity of work implied by the process of initiation. The apprentice in medicine is not like a trade apprentice. His learning facilities are not equal. His insight into practice must in many cases depend on the wish of patients quite as much as on that of his professional master. If the latter were a man of method, principle, and scientific training, with some dispensary or hospital practice, his pupil would probably have full compensation for the time devoted to this informal introduction to his future duties. In other cases again, and these not quite exceptional, he would have little exercise for his energies beyond the superficial study and manipulation of a somewhat limited stock of drugs, and of this work he might possibly have more than enough. But, further, we may doubt whether this period of initiation would not be better used by following out the same line of teaching within the walls of a medical school. He might or might not be resident at the school. In either case, if a willing pupil, he need not lack the opportunity of insight. We do not speak thus in the interest of any hospital or hospitals, in London or the provinces. We quite agree with Mr. LAFFAN that all available provincial means of instruction would have to be similarly utilised.

THE report of the French Commission—MM. BROUARDEL, CHARRIN, and ALBARRAN—upon Dr. FERRAN'S method of cholera vaccination is in great part published in the current number of our contemporary, *Le Progrès Médical*, and it certainly goes far to discredit the whole proceedings. At the outset of their inquiry the Commissioners were met by the refusal of Dr. FERRAN to demonstrate the methods of attenuation of the virus, on the ground that he had nothing to gain by so doing. Nor would he permit the Commissioners to examine the vaccinal fluid, except in his laboratory. He proposed that they should prepare a cultivation of comma bacilli and hand it over to him in a sealed box, and that in three days he would ask them to witness vaccinations from the products of these cultures. The Commissioners urged that such a proceeding was contrary to the practice of any scientific commission, and added that Dr. FERRAN was assuming a terrible responsibility in declining to divulge his methods. The members felt that their duty had ended, but obtained permission in their private capacity to see the laboratory and materials. The former is very ill supplied with the apparatus required for research: e.g., no staining reagents are used at all; and two microscopes, with powers of from 700 to 800 diameters, and without any special means of illumination, appear to have been the only instruments whereby Dr. FERRAN "discovered" the spores, muriform bodies, and other forms which he declares to be stages in the life history of the cholera organism, and upon which he renamed it "peronospora." They were shown some of these alleged spores, and found that Dr. FERRAN had somewhat altered his original views; but they could not obtain a sight of the "muriform bodies," only a promise to show them in five or six days. In fact all they saw "was not new, and everything that was new we did not see." They then inquired about the experiments, and were surprised not to see any in progress. Dr. FERRAN said that he had completed the scientific part of his work, and was now only occupied with the practical part—namely, vaccination. The statements he made about the effects of inoculation of guinea-pigs seemed to them to point to septicæmia and not cholera, for characteristic choleraic symptoms were wanting. They were present at the vaccination of about twenty Sisters of Charity, and they describe the proceeding as one in which there is a notable absence of antiseptic precautions, and the effects as not exhibiting anything in common with cholera. They then proceeded to investigate the statistical results, which they find untrustworthy as regards the actual general mortality, whilst those special to the inoculation series are as yet unpublished. Again, whereas at first the vaccination was performed *gratis*, a fee is now demanded from most of the

applicants, ranging from five francs to twelve francs and a half—a fact which may influence the statistics, as the very poor will naturally be excluded from the list of the inoculated. Unable, then, to test the value of the processes employed by Dr. FERRAN or to obtain the attenuated virus; finding that his views on the morphology of the bacillus and other points have undergone changes; that his laboratory is incompletely equipped for research; that inoculations in animals and man produce no choleraic symptoms; and that no means exist for getting at the truth about statistics,—the members of this Commission felt justified in concluding that Dr. FERRAN has been far too hasty in his declaration of the efficacy of his method, and in abandoning scientific study and experiment for the practical application of incompletely confirmed theories. There is no sufficient proof that these inoculations have any prophylactic value; and it is regrettable that the great doctrine of the attenuation of virus which we owe to PASTEUR should be compromised by such ill-judged and misdirected enthusiasm. Advices from Spain state that Dr. FERRAN has protested against these strictures, and that he was never opposed to any inquiry into the merits of his system; moreover, that he has inoculated more than 20,000 persons free of charge. It is also said that Dr. BROUARDEL "adopted anything but a conciliatory attitude towards his Spanish colleague." No doubt we shall witness a prolonged and probably a fruitless controversy upon this question, the direct outcome of the bacillary doctrine of the disease. That doctrine, as our readers well know, is in itself still a matter of dispute; but even if it be true, it by no means follows that Dr. FERRAN has not deluded himself in the extension he has given to it. Meanwhile the grim reality remains in the persistence of the epidemic, with its increasing roll of victims.

DR. LEWIS STIMSON has published in the *Medical News* a valuable paper which he recently read at a meeting of the New York Surgical Society, in which he discusses the mode of production, the signs and the appropriate treatment, of rupture of large bloodvessels in the axilla in connexion with dislocation of the shoulder-joint. The cases on which the paper is founded number forty-four, and include all he could find accurately recorded. They show that rupture of large vessels may be caused by the original injury of the dislocation, and before any attempt at reduction has been made. Possibly some of the cases in which the symptoms of ruptured artery have supervened upon reduction of a dislocation have been really of this nature, the displaced bone having by compression prevented the escape of blood from the torn vessel. However this may be, the more frequent cause has been the reduction of the dislocation. In a few of these cases a booted heel has been thrust into the axilla; many of them have been cases of old dislocations, in which the vessels have become adherent to the bone in its false position, and have been torn across in replacing it. Unquestionably atheroma renders the vessels more liable to rupture from violence of this kind, and the statistics show that age has a marked influence; more than two-thirds of the cases were over forty years of age, and many of the patients were of an advanced age. The most practical lesson to be enforced by considerations of the mode of production of the injury is that the accident is most likely to arise from extreme abduction and elevation of the limb, which forces the head down towards the axilla, and may stretch some vessel over its convexity until it tears. The modes of reduction of dislocations which do not occasion this abduction are clearly to be preferred, and this is a special merit in KOCHER'S plan. It is needless to add that it is only by extreme carelessness that the booted foot is ever placed in the axilla.

The next point to notice is that in at least two cases the axillary vein has been the sole vessel ruptured; in two other cases the axillary artery and vein have both been torn; but in the majority of cases the injury has been limited to the axillary artery or one of its branches. This last is a very important point, for it modifies the symptoms and may mislead in the diagnosis. When the main artery is ruptured, the pulse in the radial artery is lost altogether, or but faintly felt; when, however, the injury is inflicted upon one of the branches of the axillary artery—and it is most often the subscapular or the posterior circumflex,—the radial pulse is not lost, and, indeed, may be as strong as on the opposite side.

The diagnosis of the condition rests primarily upon the recognition of a rapidly produced swelling filling out the axilla, coming on very quickly after the occurrence of a dislocation or an attempt at its reduction, and independently of inflammation. A pulsation or a thrill, more or less distinct, may be present, but is not to be relied upon for diagnosis. Where the radial pulse is lost or greatly weakened, an injury to the main vessel may be inferred; where, on the other hand, the pulse in the artery beyond the swelling is not thus markedly affected, an injury to the vein, or more probably a tear in a large arterial branch, is to be diagnosed. There is no means at present known of diagnosing with certainty in all cases between these conditions, but the dissection of cases shows conclusively that the arteries are more liable to rupture than the veins.

The most important point, however, is the line of treatment to be followed in these cases. The great surgical rule of applying a ligature at once to both ends of a torn artery has been put into practice in two cases at least, and at a later stage in five other cases, and in all with a fatal result, so that Dr. STIMSON decides against this plan of treatment. The operation may prove to be one of very considerable difficulty, and a good deal of blood may be lost in its execution; to lay open, too, a cavity filled with loose blood-clot, and possibly communicating with the shoulder-joint, exposes the patient to great risk of blood-poisoning—a risk, however, which can be successfully guarded against by a proper use of our present means. If this treatment be rejected, what can be substituted for it? The surgeon may temporise, he may tie the subclavian artery, or he may amputate the limb at the shoulder-joint. The last is such an extreme measure that everyone would shrink from resorting to it until its absolute necessity had been proved; this happily is not yet the case. The subclavian artery has been ligatured in fourteen cases: in five the patients recovered, in eight death ensued, and in one the result is unknown. Out of twenty cases in which non-operative treatment has been adopted throughout, there have been six cases of recovery and fourteen deaths, and in other cases an operation—ligature

or amputation—has been subsequently adopted. The most important outcome of these statistics is that recovery may occur without operation, a fact quite in harmony with the results of the subcutaneous injury of arteries in other situations. The best practice, therefore, in any case of this kind, is first of all to try to attempt a cure by these natural means: The limb should be fixed to the side, and a pad of cotton-wool should be firmly bandaged over the shoulder and axilla; outside all a large ice-bag may be applied. The progress of the case must then be carefully watched. If the swelling do not increase, and the circulation be maintained in the arm and hand, the treatment should be continued. If, however, the hæmorrhage increase, and the swelling become more tense and threaten to burst, it should at once be discontinued, and a ligature applied to the subclavian artery. If there be signs of gangrene in the limb, it would be better to amputate at the shoulder-joint. Surgeons will no doubt always feel tempted to apply a ligature to the wounded vessel, and follow out the well-attested surgical rule; at present, however, statistics are entirely opposed to this line of practice, and ligature of the subclavian trunk appears to be the better course to follow where an operation is required.

Annotations.

"Ne quid nimis."

THE CHOLERA IN SPAIN.

THE course which the outbreak of cholera in Spain is now following was certainly not anticipated when it first became evident that the disease was about to assume an epidemic form; indeed, it was generally feared that as the summer weather progressed the outbreak would become more widely diffused, both as regards the area of incidence and the numbers attacked. But within the past week a considerable change has taken place, and this without any diminution in the temperature. Towards the close of last week the daily number of attacks had reached between 1500 and 1600, and no less than some 650 of them terminated fatally. Since then, although there has been some increase in special localities, yet throughout the affected districts generally there has been a steady and substantial diminution, there having been a fall of nearly 400 cases and some 70 to 80 deaths per diem. The constantly recurring daily mortality from cholera in Madrid was also expected soon to develop larger proportions, and the fate of the capital has been watched with extreme anxiety; but, so far, the extension which was so much feared has not been brought about, although there has as yet been no diminution in the daily number of attacks and deaths in the city itself. Cholera often moves forward by sudden bounds, which are interrupted by brief intermissions, but the experience derived from the Spanish epidemic during the past week is rather that of a sustained and continuing diminution in severity, and this in face of the fact that the present is the season which is most favourable to an extension of the epidemic. The circumstance is so unusual that we feel it would be unwise as yet to draw any inference from it as to the course of the outbreak during the coming month. The worst anticipations may be still be realised; but there is now at least reason to hope that the experience of the past six days may indicate that the epidemic is about to run an unusual course, and that it may continue to subside even during such a month as August.

The following is extracted from a letter from Dr. Sereñana to the *Independencia Médica* of Barcelona of July 11th:—

"The epidemic is increasing. From five o'clock yesterday afternoon to the same hour to-day there have been in the capital 200 deaths. The panic is great and the streets of Valencia deserted. The medical profession has given proofs of its humanity and its love of science; confident of the efficacy of the prophylactic remedy of our immortal Ferrán, it has submitted, almost without exception, to inoculation of the microbe—not once only, but twice, and in some cases three times, which we consider affords a complete protection. There scarcely remains a single doctor in Valencia who has not been inoculated, and Dr. Peset, who, without being opposed to the remedy, did not wish to be operated on himself, died a few days ago of cholera.....The consulting-room laboratory of Dr. Ferrán, situated in one of the new streets of Valencia, is becoming a perfect Babel. It is open every day from 8 A.M. to 11 P.M., and two relays of three doctors at a time scarcely lay down their injecting syringes, so continually do people keep pouring into the inoculation-room."

He then describes the scene at another place, where Ferrán's agents went to inoculate the inhabitants:—

"More than 400 persons of both sexes assembled in the spacious hall (of the school), with as many more in the street, all wishing to have two centimetres of anti-cholera preparation injected. The confusion was so great that it became necessary to call in the aid of the police to keep order amongst those who were to be operated on, as they kept on disputing with one another as to who should be first inoculated. From half-past three to seven we performed 674 inoculations. The men presented themselves with bared arms, and the women had taken the precaution of cutting a hole in each sleeve of their dress."

MR. ERICHSEN AND THE UNIVERSITIES OF EDINBURGH AND ST. ANDREWS.

ONE or two preliminary meetings of graduates favourable to the election of Mr. Erichsen have been held in London. These included Sir Risdon Bennett, Dr. Lauder Brunton, Dr. George Harley, Dr. Ogilvy, Mr. Raleigh, Dr. Farquharson, Dr. Glover, Dr. Potter, &c. There is a very general feeling that the University seat should be given to a representative of science, and especially of medical science, as that science is the one in which the University has sent forth her most distinguished sons for generations. No doubt Mr. Erichsen's claim would have been much stronger had he had more intimate relations with the University; but no candidate has perfect claims; and we can imagine few things better for the University, for the medical profession, and for medical education in England, than that one of the foremost teachers and professors of England should, by election to Parliament, be compelled to study the Scotch system of university teaching. Mr. Erichsen has been in Scotland this week, and has had the opportunity of conferring with his supporters in Edinburgh. We have received numerous letters on the subject of the election and of Mr. Erichsen's candidature, some of them by medical graduates, who, respecting Mr. Erichsen greatly, cannot lay aside their strong political proclivities. Perhaps these gentlemen will reconsider their views. They cannot suspect Mr. Erichsen of being likely to refuse to conserve anything that is good, and they must admit that his presence in the new House of Commons will be a better omen for the public and the new Parliament than any number of respectable lawyers, who abound most painfully in both Houses.

PUERPERAL CONVULSIONS WITHOUT ALBUMINURIA.

DR. N. VUCCINO of Rodosto, writing in the Constantinople *Gazette Médicale d'Orient*, gives the case of a lady usually enjoying excellent health, except for occasional hysterical attacks, who in the fourth month of her first pregnancy was seized with a severe frontal hemicrania of quotidian type. At the end of the sixth month she was awakened one night with intense pain in the head, followed by a slight convulsion affecting the upper extremities. In the morning the writer found her suffering from general convulsions, consciousness being lost, and a bloody froth issuing from the mouth; the pulse was small and hard; but the urine was then, and continued to be, perfectly normal. Various methods of treatment having proved fruitless, it was decided to bring on the labour, which was done by injecting hot water (32°). After this had been continued for three hours and a half, the os uteri became fully dilated, and a dead child was shortly afterwards expelled. The convulsions ceased as if by magic, and in twelve days she was able to resume her household occupations. She afterwards enjoyed good health till the eighth month of her second pregnancy, when convulsions reappeared with greater intensity than before. Chloral and chloroform proving inefficacious, the continual hot vaginal douche was again employed. In consequence of the irregularity of the contractions of the uterus forceps were required. The convulsions ceased five hours after delivery, and in seventeen days she was again in her normal condition. She subsequently became pregnant for the third time, and during the second month suffered from some premonitory convulsive symptoms, which were increased by vaginal examination; these came to an end on the patient aborting. The author considers the case interesting, as showing how convulsions, due, as he believes, to a highly nervous condition of the uterus, may simulate those connected with renal and urinary mischief.

ENGLISH MORTALITY IN 1885.

THE Registrar-General's weekly return of mortality in a population of nearly nine millions, living in twenty-eight of the largest English towns, beyond serving as a valuable health bulletin of these individual urban aggregations, affords a useful and trustworthy indication of the general state of the national public health. Experience has shown that there is a fairly constant relation between the death-rate in the aggregate of the twenty-eight towns and that in the whole of England and Wales. The mean death-rate in these large towns in the second quarter of this year did not exceed 20·6 per 1000, and was 1·0 below the average rate in the corresponding periods of the nine years 1876-84. In the first half of this year the mean rate in these towns was 21·3, against 22·8, 22·7, and 21·0 in the corresponding periods of the three years 1882-84. A marked decline in the English death-rate took place in 1881, when it fell to 18·9; and the rate was notably constant at 19·6, 19·5, and 19·6 in the following three years, 1882-84. The available statistics for the first half of this year afford good ground for the hope that the death-rate for 1885 will show a continuance of this remarkable decline. Should this expectation be fulfilled, the mean English death-rate in the first half of the current decennium 1881-90 will show a decline of nearly 3 per 1000 from the mean national death-rate in the thirty years 1841-70, which was 22·3. So important a decline steadily maintained for such a period as five years appears to contravene all doubt as to the relation between this increased longevity of the English people and the era of active sanitation initiated by the Public Health Acts of 1872 and 1875. The field for still further sanitary progress need not be here referred to more particularly than to point out that during last quarter the annual death-rate in the twenty-eight large English towns ranged from 15·7 and 15·8 in Derby and Brighton, to 25·2 in Blackburn, 25·5 in Cardiff, 27·0 in Preston, 29·5 in Manchester, and 31·8 in Newcastle-upon-Tyne.

COCAINE IN HAY FEVER.

THE therapeutical uses of cocaine are so numerous that the value of this wonderful remedy seems only beginning to be appreciated. Almost daily we hear of some disease or combination of symptoms in which it has been tried for the first time and has answered beyond expectation. It appears strange that so intractable a complaint as hay fever should be amenable to its influence, and yet such is the case. The account given by Mr. Watson, of the Westminster Hospital, of his sufferings and subsequent cure by tabloids of cocaine, is too circumstantial to admit of doubt, even had we not received confirmatory evidence from many sources. It has been objected on theoretical grounds that cocaine must of necessity be inoperative, or at all events of comparatively little use, in those cases in which symptoms of an asthmatic type prevail. Curiously enough, however, it has been shown that cocaine, when applied to the mucous membrane of the nostrils, has the power of allaying even this spasm. The observation, too, is not new; for many months ago Dr. Bosworth, Professor of Laryngology at Bellevue Hospital Medical College, published a detailed account of a case of spasmodic asthma completely cured by cocaine. He pointed out at the time that many inveterate cases of asthma are dependent on, or at all events associated with, nasal disorders, the relief of which is promptly followed by an abatement of all the distressing symptoms. If this principle of associated treatment should be carried on in its integrity it will be difficult to assign the limits of its sphere of action.

CHOLERA AND THE WATER-SUPPLY OF VILLAGES.

WE regret to hear that in many parts of the country, especially in some of the eastern counties, the supply of spring and well water has fallen very short, indeed in some places entirely failed, and that the poorer inhabitants are forced to resort for water to stagnant ponds and ditches. In these, owing to the drought, the water is scanty and in a highly concentrated state, being charged with organic matter in a state of decay. Such a state of things must be regarded as highly dangerous, since the chance introduction of a case of cholera into one of these villages would find all the conditions requisite for the development of the disease, and form a centre from which the surrounding districts would be rapidly infected. Nor is the chance of the possible introduction of a case of cholera into these villages at all conjectural; since many, which are suffering most from failure of the wells, are situated in South Essex, close to the banks of the Thames and in intimate connexion with the large docks. In many of these villages the families of men engaged on board the London steamships and vessels reside, and the men on landing—those, at least, who are engaged on board regular trading-ships, and have not to look out for fresh employment—usually spend a day or so with their families between the voyages, whilst the vessel is in dock. Independently, however, of the danger of cholera, the failure of the wells in this district is much to be regretted, as likely to lead to an increase of malaria, a disease which of late years, since the water-supply has been improved by the sinking of wells, has very much diminished among the population. Parkes pointed this out very forcibly in the contrast he drew between the frequency of ague at Tilbury Fort, where the garrison used tank-water, and the immunity from the disease among the railway servants at Tilbury station

who drew their drinking-water from a well on the company's premises. Dysenteric diarrhœa, as a consequence of the deficicent and impure water-supply, is very likely to be prevalent in these districts, especially among young children. The failure of the wells in the South Essex district is attributed to two causes: first, to the dryness of the last two summers; and, secondly, to the subsoil drainage caused by the deep cuttings in clay by the works for the docks at Tilbury, and also acting in a similar way by the increase of the brickfields along the banks of the Thames. The remedy, of course, is to make the existing wells deeper; but this will take time and also be costly, though it must be undertaken sooner or later. For the present every effort should be employed to improve the drinking-water, such as it is, and to prevent its further contamination. The villagers should be taught the importance of always boiling pond and ditch water before using it, and the gift of a few cheap filters, to filter the water after boiling, would prove a great boon, and do much to prevent the extension of dysenteric diarrhœa amongst the children. It should, moreover, be the duty of the leading members of the village, the clergyman, the doctor, the squire, and the principal farmers, to form a sanitary committee among themselves, to visit the cottages, to see that the cesspools have no connexion with the ditches or ponds from which the drinking supply is taken, and to direct that any case of choleraic diarrhœa arising should be at once reported to them, so that its nature might be inquired into and the case promptly dealt with.

THE INTERNATIONAL MEDICAL CONGRESS.

THE Committee of the American Medical Association, appointed to nominate the list of officers and make the arrangements for the Congress which is to meet in Washington in 1887, has made a preliminary report. It confirms the nomination of Dr. Austin Flint for the post of President. This, we imagine, was never for a moment doubtful, and as the success of the Congress depends in no small measure upon its President, we are glad to know that this element of success will not be wanting at the Washington meeting. Among the Vice-Presidents we find the name of Dr. E. Oliver Wendell Holmes. We trust some arrangement will be made for him to give an address at the meeting. The Secretary-General is Dr. John Packard of Philadelphia, and Professor F. S. Dennis is nominated Chairman of the Finance Committee; these also are excellent nominations. The scientific work of the Congress will be conducted in sixteen sections, one of which will devote attention to the work of Collective Investigation.

THE PATHOLOGY OF CHOLERA.

DR. CHARLES S. ROY, Professor of Pathology in the University of Cambridge, accompanied by Mr. S. C. Sherrington, of Caius College, Cambridge ("George Henry Lewes" student), and Dr. Graham Brown of Edinburgh, are in Spain, having gone thither with the special object of investigating the subject of the pathology of cholera. Grants of money have been made by the University of Cambridge, the Royal Society, and the Association for the Advancement of Medicine by Research. The inquiry has been warmly supported by the latter Association, and Dr. Roy's reports will be sent to them.

At the present juncture, when Dr. Koch's views respecting the comma bacillus and cholera have been subject to such strong criticism, and particularly since the late Government Commission, sent out from this country to India, arrived at so positive a conclusion against the alleged etiological connexion between the micro-organism and the disease, the need of further investigation by a thoroughly independent body of observers is manifest. Professor Roy, during his tenure of office at the Brown Institution, devoted much time to the study of anthrax, epizootic pleuro-pneumonia, and other diseases in which micro-organisms play a part. His colleagues are also well trained in scientific investigations; and, what is of chief importance, not one of the members of this Commission has, so far as we know, committed himself to any definite opinion upon the subject-matter of their inquiry. The task before them is no light one; but we may be sure that they will perform it with thoroughness and scientific caution. They will necessarily be confronted with the doctrines and practices of Dr. Ferrán; but we imagine that until they have satisfied themselves of the primary question, they will not pay much heed to them. We hope to be able to report the progress of this inquiry, and look for some substantial gain therefrom towards the elucidation of the most perplexing pathological problem of our time.

NEURALGIC HEADACHE OF WOMEN.

THE increased, and apparently increasing, frequency of neuralgic headache among women must needs have a cause. There is one of singular simplicity and quite obvious which has been overlooked, and to which it is worth while to draw attention. The pain experienced is generally located in one or more of the branches of the second cervical nerve, very commonly those terminating in the scalp at the occiput. As a matter of fact, the nerves of the scalp are irritated by the hair being drawn tightly back and put on the strain, not as a whole, in which case the strain would be spread over a large area of the surface, but by small bundles of hair which are pulled back and held in place by hair-pins. Relief is often consciously experienced as a result of removing the hair-pins, but this has only a temporary and partial effect. The injury done is lasting, if not permanent, in its consequences. The present style of dressing the hair should be discontinued, as it probably, in part at least, accounts for the extreme prevalence of a form of suffering which is both intractable and distressing.

SIGNS OF LIVE-BIRTH.

ON July 8th, a woman, aged twenty-three, was tried before Mr. Justice Mathew, at the Newcastle Assizes, for the murder of her illegitimate male child at Haltwhistle on May 8th. The prisoner, a domestic servant, pleaded not guilty to the indictment, but admitted having concealed the birth. The case may be said to have turned entirely on the medical evidence, and concerning this the judge delivered himself in no measured terms. The body of the infant was found in a ditch, covered with an apron and some leaves. There were no marks of violence upon it. The throat, the windpipe throughout its whole length, and the stomach contained mud. The lungs were of a bright-red colour, and floated when placed in water. It did not appear that the death had taken place from loss of blood—at least this was the opinion given by one of the medical witnesses. We do not find that the condition of the lungs was stated in detail, but if the above description as to the colour and degree of inflation can be accepted with confidence, the presumption is certainly in favour of live-birth. As regards inflation, of course this might have been effected either by the natural efforts to breathe or by artificial means; or, again, the lungs might float from the presence of gases set free by decomposition. It does not appear, however, that the latter plea was advanced by counsel for the defence. There was some discrepancy between the evidence of the doctors as to whether or not, or to what extent, the hands were clenched. This point may be dismissed as of little value one way or the other. For the prisoner, it was contended that an interval of four hours elapsed between the birth and its concealment in the ditch, and, further, that no cry was

heard by any member of the family in which the prisoner lived. Mr. Justice Mathew laid great stresss upon the improbability of a newly-born child remaining alive for four hours in a house in which were several persons without its cry being heard. It is neither our purpose nor desire to argue against the supposed extenuating circumstances, nor to challenge as incorrect the interpretations of the evidence given by the learned judge; but, to say the least, it is singular that in a case of still-birth the lungs should have been found of a bright-red colour, and apparently inflated with air, not to mention the other signs of separate existence—mud in the gullet and windpipe, and the absence of marked anæmia. These unfortunate women are such objects of sympathy that it is not to be wondered at that judge and jury should, whenever the slightest doubt exists, unhesitatingly give the benefit of it to the accused. To one remark made by Mr. Justice Mathew we entirely subscribe—viz., that when it is a matter of life and death to the prisoner, the medical evidence on which a conviction is sought should be unimpeachable. We do not wish to cast the least reflection or imputation upon the gentlemen concerned in the case now under notice, for it cannot be expected that they should be fully conversant with all the technical details involved in a difficult inquiry; and for that reason it is to be regretted that expert testimony is not furnished to the Court in all instances where the capital charge is brought. It was, perhaps, not altogether unfortunate for the prisoner that her counsel was able to point to some slight inconsistencies in the medical evidence, and that no expert witnesses were put forward by the Crown.

BERLIN AS A MEDICAL CENTRE.

DR. HORATIO R. BIGELOW has republished from the *New England Medical Monthly* a guide for medical practitioners and students in Berlin, written for the information of his fellow-countrymen; it is likewise of use to our English brethren, and its perusal will be sure to save much needless trouble on the part of the intending student. The author says rightly that Berlin is rapidly attaining the foremost place as a seat of medical learning, distancing its former superior rival, Vienna. The information contained in this little guide-book is ample and detailed; whilst the practical hints upon travelling, lodgings, &c., are equally good and reliable. The author was himself particularly interested in gynæcology, and his remarks on the various clinics in this subject will be appreciated.

SUPPLY OF WATER TO DWELLING-HOUSES.

AT a meeting of the Clerkenwell vestry on July 9th, the owner of a house in that district appeared to protest against the prosecution of the vestry, who were proceeding against him for not having complied with their order to provide a water-supply for a house occupied by twenty persons. The water-supply had been cut off by the water company on account of the absence of proper fittings, and the owner objected to incur the expenditure necessary to provide those which would meet the requirement of the company. The medical officer of health stated that the vestry could not compel landlords to put on water, but could proceed against them for a nuisance if such arose from the absence of water. This is no doubt correct in the particular case, but the vestry need not always wait for a nuisance to occur before taking action. The vestry can require a water-supply under the 27th section of 15 and 16 Vict., cap. 84, provided it can be supplied at a rate not exceeding threepence per week, and may, if their notice be not complied with, do the necessary work and recover the expenses from the owner. Again, the absence of proper fittings itself constitutes a nuisance within the meaning of the Nuisance Removal Act when these are required for the purpose of a constant water-supply (34 and 35 Vict., cap. 113, section 33). Under other circumstances, the nuisance must occur first before the vestry can proceed to procure the very necessary supply of water for a dwelling-house; and thus the *prevention* of a condition which is injurious to health is not within the power of the sanitary authority, but merely the abatement of a nuisance.

NEW CONVALESCENT HOME FOR ST. BARTHOLOMEW'S HOSPITAL.

ST. BARTHOLOMEW'S HOSPITAL has just received a most important addition to its means of treating patients in the shape of a spacious and well-fitted Convalescent Home at Swanley in Kent. This home is a gift from Mr. C. T Kettlewell, in memory of his brother, who died abroad of typhoid fever. The building, which is of brick and supplied with the most approved sanitary appliances, has cost £15,000. The grounds, which extend over fifteen acres, have been added by a governor of St. Bartholomew's, who does not wish his name mentioned. A chapel has been given by Mr. R. Homan, the almoner of the hospital, and an organ by Sir James Tyler, another governor and former almoner. This gentleman has also given the entrance lodge. A steam laundry has been built in the grounds for the use of the hospital. The Convalescent Home accommodates seventy patients. The ceremony of the opening by the Prince and Princess of Wales took place on the 13th inst. After prayer had been offered, Sir Sydney Waterlow (treasurer of St. Bartholomew's Hospital) briefly explained the circumstances under which the Home had been built. For many years the hospital authorities and the staff had been most anxious to obtain a Convalescent Home, and in the year 1872 one of the governors presented to the hospital Lauderdale House, Highgate, as a temporary institution. This was opened by the Prince of Wales, and during the thirteen years that have elapsed since that time nearly 5000 patients have received benefit from it. It was, however, only available for males. The new institution, besides being much more commodious, will accommodate both sexes. The Prince of Wales expressed his pleasure in opening such a valuable institution in such a beautiful spot.

MIGRAINE AND MASSAGE.

THE value of massage in the treatment of nervous disorders, chiefly of a functional nature, has been proved beyond all cavil. The little book "Traitement de la Migraine par le Massage," by Dr. Norström,[1] is of much interest, the more so as the views adopted are not those which have been generally accepted. It treats of the etiology and symptoms, analysing briefly the pain, vaso-motor disturbances, and trophic disorders of megrim. The author does not arrive at any peculiar view with regard to the relation of these symptoms one to another; he does not regard the disease as essentially of vaso-motor origin. The painful spots which may be detected in different parts of the head are, for him, of great importance. His observations are in harmony with those of Hensen, Helleday, and Wretlind, who have demonstrated the great frequence of local lesions in megrim. "Many cases of migraine are dependent on the presence in the neighbourhood of nerves of inflammatory foci due to acute or chronic myositis." This is the theory which Dr. Norström supports. The predisposing cause of the indurated spots, he thinks, is rheumatism. The local inflammations, being liable to various changes and exacerbations, exercise a varying influence on the terminations of nerves in their neighbourhood.

[1] Paris: A. Delahaye and E. Lecrosnier. 1885.

These local irritations may act directly or reflexly in causing pain; the vaso-motor nerves may intervene in the irradiation of the abnormal nervous impulses. Although the above views are not the most generally accepted ones, still they cannot be regarded as altogether illogical. Dr. Norström believes that massage—the method of which, by the way, he does not specially indicate—influences for good by removing the local inflammatory mischief. Many cases are reported in which the treatment proved curative or largely ameliorative. This treatment of megrim is by no means new, though it may not have been so systematically adopted as it has been by Dr. Norström. We may have doubts of the mode of its action, but none of its more than occasional beneficial effects.

"TIME" AND THE HOUSING OF THE POOR.

To those persons who have not leisure to read the ponderous volumes giving the evidence collected by the Royal Commission on the Housing of the Poor we may recommend a brief summary of this report, published in the July number of *Time*. The article in question is written by Mr. David F. Schloss, who, as the Honorary Secretary of the Sanitary Committee appointed by the Jewish Board of Guardians, has had special opportunities of mastering the subject. Under his direction 2328 houses occupied by Jews in the East-end of London have been inspected; and, be it remarked in passing, only 276 had waterclosets. The other houses may have had closets, but there was no water. It is a gratifying fact that a popular magazine of this description should be found willing to treat so serious a subject. Briefly, Mr. Schloss protests against the *bak-sheesh* which it is necessary to give the scavenger before household refuse can be removed, and against the inequality of the work imposed on sanitary inspectors and the dependent position of medical officers of health. In the West-end there is a sanitary inspector for each 9000 of the population, and at Mile-end there is only one inspector for 105,000 inhabitants. Far more than in the case of the parish doctor or the master of a workhouse, it is important that the medical officer should not be liable to dismissal from his post by local authorities if he is to compel these latter to do their duty. It is, indeed, improved motive power rather than new legal machinery which is most needed, and our sanitary officers should be absolutely independent of the intrigues arising from local interests often arrayed on the side of abuses which it is their mission to remove. We are pleased to note that the lay press is supporting our views in this matter.

PECULIAR CASES OF INTERMITTENT FEVER.

DR. T. PALOP of Ronda mentions in the *Génio Médico Quirurgico* two cases of intermittent fever in which he was able to discover and remove the cause, and so effect an instantaneous cure:—1. A young man had suffered for some time with a fever which ran through a regular cycle of modifications every week. On the Sunday a cold stage of about an hour's duration was succeeded by a hot stage of great severity, followed by copious general perspiration and pain situated on the left side of the head. On Monday the fever had disappeared, but the pain remained unchanged till Tuesday or Wednesday, when it extended over the whole head, improvement not taking place till Saturday. Quinine had been prescribed in various ways, and had proved useless. On examination a small fluid tumour was discovered behind the left ear, of which the patient thought nothing. A bistoury plunged deeply into this brought away a little blood and pus. On examination of the wound a dermoid cyst was found in the form of a ring; this was removed, and the patient had no more fever. 2. A working man, who had previously been cured of fever by quinine, on being again attacked by fever of a tertian type, found that similar treatment was of no avail. An inflamed bursa over the patella was aspirated, pus being removed, with the result that, though suffering from a rigor at the time, as soon as the pus was evacuated he exclaimed, "Now I'm all right," and the fever did not return.

HYSTERIA IN A BOY.

ALTHOUGH neurologists and alienists are familiar with the occurrence of hysterical phenomena in boys, yet the fact seems not to be sufficiently recognised by the profession at large. So that the report of a case from time to time serves the purpose of keeping the practitioner alive to the circumstance. Dr. Savage has recorded such a case in the *Journal of Mental Science* for July. The patient was a boy aged eleven years, in whose family there was no history of insanity. He was in every way healthy until January 4th, when he went to the funeral of a little sister who died as the result of an accident. On January 5th he did not play, gave up all his ordinary habits, became dull, his appetite failed, and his bowels became confined. He evidently had some delusion about his stools, for he said that he did not pass anything; but it was discovered that he threw one motion out of the window. He would refuse to eat with the rest of the family, but would steal food or eat it on the sly. During February he was in much the same condition, except that he would hide his face and scream for hours together. The next month was marked by a further development of the symptoms, so that he said he could not walk. He did not lose flesh. He was admitted into Bethlehem Hospital on April 23rd, and was "crouched into a ball." He was very noisy, and complained of pain in his head. The treatment consisted in judicious neglect and shower-baths. Regular daily exercise and gymnastics were ordered later on, and complete recovery ensued. Dr. Savage says that he accepted such a case at the asylum with hesitation. We think that, in the absence of a Home for the mentally weak, the acceptance of such a case at the asylum was decidedly the best thing that could be done.

"SEATS FOR SHOP-GIRLS."

WE are glad to find a letter in a contemporary with this heading. The agitation in favour of making it obligatory on shopkeepers to provide seats for their *employées* ought to be revived. We have already done much in the matter, and will gladly do more; but nothing short of an Act of Parliament will suffice to secure the object in view. It is now suggested that a clause might be introduced into Sir John Lubbock's Bill with a view to provide the required enactment. In Massachusetts and Missouri they are wiser than we are in respect of this matter. Why do we lag behind our cousins or brethren on the other side of the Atlantic?

RUSSIA'S CHOLERA REGULATIONS.

THE attitude of some Governments as regards cholera prevention is certainly very curious. Europe as a whole probably considers that England, in abandoning quarantine and cordons, is actuated by other than medical considerations, but they must at least admit that she is consistent in so far as she is entirely supported by those whom she has chosen as her medical advisers in this matter. But it is often different in other countries, and Russia offers the last example of this. Russia sent to the International Sanitary Conference a delegate who was a member of the Disinfection Committee, and that committee decided that it was useless to attempt to disinfect anything but articles that had actually been infected or soiled by choleraic discharges, the Conference supporting their view. And yet we find that all

railway carriages and other articles coming into Russia from Austria, a country in which there is absolutely no cholera, are to be disinfected. Naturally, the Austrians, who are exporters of such things as bacon, cheese, and fruit, protest, but we fear their protests will be unavailing. Governments themselves need as much education as to the common-sense aspect of cholera as the most ignorant of their populations.

LECTURES AT THE HOSPITAL FOR SICK CHILDREN.

As a part of the course of lectures which have been delivered by the officers of this institution, Mr. John H. Morgan has discussed the interesting subject of Diseases of the Urinary Tract in the Young. The large experience which is afforded by the practice of this hospital gives considerable opportunities for study of such affections, and the lectures were enhanced in value by the exhibition of a number of patients and of specimens and drawings from the museum. Proceeding upwards from the meatus a number of curious malformations and deformities were first described and illustrated, and various means for remedying them were discussed. Calculus and its treatment formed the subject of the second lecture; and in the third tuberculosis and various functional diseases were described. The exceptional opportunities for collective experience which is afforded by the practice of this hospital has thus been utilised, and in the interests of students and practitioners it is to be hoped that this system of lectures may be repeated.

CONTREXÉVILLE.

THE value of the waters of Contrexéville has been again attested by some notes recently contributed to THE LANCET (June 20th) by Dr. Cruise. The waters are mildly alkaline, saline, and tonic. The alkalinity is due to the presence of salts of calcium and magnesium. Sulphate of soda and magnesia give the waters their purgative action. The tonic effects are the result of the ferruginous and arsenical salts which the waters contain. The springs of Contrexéville are all cold, and vary somewhat in strength. The waters are of most service in the treatment of chronic affections of the urinary organs, especially when associated with the presence of concretions. Gout in its chronic atonic forms, hepatic disorders, nocturnal incontinence of urine, and diabetes are said to be favourably influenced by treatment with the waters. A stay at Contrexéville under the care of a resident physician for three weeks is the usual course of treatment. But the waters are also imported into this country.

THE HYDROSTATIC TEST.

IN the *Revista dos Cursos Praticos e Theoricos* of the Rio de Janeiro Faculty of Medicine, Professor Souza Lima describes the examination of the body of an infant in connexion with which, but for oral testimony, very serious and erroneous results under the criminal laws might have arisen. The child was well developed, 58 centimetres in length, weighing 3980 grammes. There were contusions of the right temporal region, with slight emphysema and œdema of the cheek, together with a small incised wound. On the front of the neck a dark transverse line was seen indicating a constricting agent. In the mouth a deep incised wound was found, passing through the hard palate into the interior of the cranium; the blood which had oozed from this was coagulated. The lungs floated freely in water, even when subjected to every test; and they were certainly not putrid, nor frozen, nor had they been macerated in alcohol; so that, according to the received medico-legal doctrines, the child must have breathed, and, in fact, breathed after birth, for any respiration which is possible before birth must be so incomplete as to prevent the lungs floating so decidedly in water as these did. The case was apparently one of infanticide. The true explanation was, however, as follows: The labour was long and tedious, the presentation being a breech. After the birth of the trunk and limbs, the uterus contracted with a kind of tetanic spasm, so that it was impossible to complete the extraction of the child without operative procedure. Embryotomy was therefore performed through the mouth. It is clear that under these circumstances no respiration of any kind can possibly have taken place. Professor Souza Lima thinks that unless the hydrostatic test is corroborated by other circumstances, it should not be implicitly relied upon.

CHOLERA AND CARDIFF PORT.

LAST year the sanitary organisation of Cardiff Port sufficed to keep imported cholera from reaching our shores. But though the port sanitary authority have their cholera hospital on the Flat Holmes Island, at a distance from the town, it would appear that the boarding station for foreign vessels is within the docks, and the Corporation have, by means of a deputation, brought the matter under the notice of the President of the Local Government Board. Unfortunately two authorities are concerned in this matter, for the Customs officers who first board the vessels are in no way subject to the central health authority. Mr. Balfour, admitting that the matter is one of extreme importance, has promised that it shall have his immediate attention, and it would be well if this promise were extended to all ports alike, for in many of them vessels are submitted to their first examination in localities which it is most important that cholera should not be able to reach.

THE PATENT MEDICINES STAMP TAX.

IN the House of Commons on Monday, Sir H. Holland, the Financial Secretary to the Treasury, in reply to a question by Mr. Warton, stated that although the Government did not propose proceeding with the Poisons Bill, the Patent Medicines Stamp would be altered in form so as to make it clear that it afforded no guarantee of the genuineness of the medicine. We understand that in future the words "This stamp implies no Government guarantee" will be printed on each stamp. This is a step in the right direction, and we are glad to find that the Government is prepared to deal promptly with a subject of such importance to the health of the nation.

ARSENIC IN GLAUBER'S SALTS.

A NOTE contributed to the *British and Colonial Druggist* by Sir Charles Cameron again draws attention to the contamination of drugs in common use. In a sample in Sir Charles's possession eight grains of arsenious acid were found in a pound avoirdupois of the salt. The sulphuric acid of commerce is rarely free from arsenic. Sulphate of magnesium and sodium prepared with an impure acid might contain dangerously large proportions of arsenious acid.

FEIGNED AND HYSTERICAL APHONIA.

FEIGNED APHONIA is not the same thing as hysterical loss of voice. Dr. Moure has contrasted the two conditions in a communication to the *Revue Mensuelle de Laryngologie*. The counterfeit case was that of a boy aged twelve, who, whilst being examined with the laryngoscope, had the greatest difficulty in preventing himself from phonating. The hysterical or nervous case was also that of a boy aged nine, who, like most hysterical cases, was an excellent subject for laryngoscopical examination. The application of electricity in the latter case caused the disappearance

of the paralysis of the adductors of the vocal cord. In the first class of cases the will is very strong, and causes the paralysis. We may say that in hysterical aphonia the will is very feeble, and allows of the paralysis by a want of determination. The expression "we may say" is used advisedly, as there are other interpretations perhaps equally good.

MENTHOL AS A SUBSTITUTE FOR COCAINE.

DR. ALBERT ROSENBERG of Berlin has found in menthol, (*Berl. Klin. Woch.*, No. 28) in etherial or alcoholic solution (20 to 30 per cent.), a useful substitute for the expensive cocaine, in cases where local anæsthesia of mucous membranes—e.g., of nose, pharynx, and larynx—is required. The effect of menthol is not so lasting as that of cocaine, but it appears to have somewhat of a cumulative action; for, when repeated, even after a long interval, the later application produced a longer period of anæsthesia than the earlier.

MICRO-ORGANISMS IN CONDYLOMATA.

N. UNKOWSKI has examined several condylomata, and found the lymph spaces greatly enlarged. They were not always empty, but when examined with care numerous colonies of micrococci could be seen, which were connected together by a mucous, jelly-like substance. The nearer the base of the condyloma the more numerous were the colonies. The writer thinks it probable that there were rods present, but is unable to speak positively on this point.

HOSPITAL SUNDAY FUND.

THE amount received at the Mansion House on behalf of the Hospital Sunday Fund has now reached the sum of £31,500.

AT the June matriculation examination of the University of London, out of over 1100 candidates 615 proved successful. In the honours list a lady occupies the first place, and the names of twenty-nine others appear in the same list, which comprises 136. In the first division 335 candidates passed, and in the second division forty-four. Thirty-five candidates have obtained either prizes or the number of marks qualifying for prizes, eight of these being ladies. Last year 972 candidates presented themselves for this examination, and 536 passed.

C. J. CULLINGWORTH, M.D., M.R.C.P., Physician to St. Mary's Hospital, Manchester, and Lecturer on Medical Jurisprudence at the Owens College, has been elected Professor of Obstetrics and the Diseases of Women at the Owens College, Manchester, in the room of John Thorburn, M.D., F.R.C.P., deceased.

THE ceremony of unveiling a statue of Pinel, the madman's friend, took place in Paris on Monday last. The statue, a gift of the Société Médico-Psychologique de Paris, is to be placed on the Place de la Salpétrière, in front of the asylum of which Pinel was for many years the director and benefactor.

TELEGRAMS from Marseilles state that the sanitary condition of the military camp at Pas des Lanciers, Paris, is becoming worse, and that owing to the numerous cases of typhus among the troops the immediate dissolution of the camp is regarded as imperative.

PROFESSOR P. VOGT, who succeeded Professor Hueter in the chair of Surgery at Greifswald, has died suddenly, in his forty-first year.

WE are informed that, whereas only three deaths resulted from fever in Swansea during the three months ending June last, seven deaths were referred to this cause in the registration sub-district of Swansea in the first fourteen days of July.

IT is rumoured that the Professorship at South Kensington, vacant by the retirement of Professor Huxley, will not be filled up, but that, instead of it, two Lectureships of £300 a year each will be created.

THE St. Petersburg *Medizinische Wochenschrift* states that there is a great lack of hospital accommodation in Warsaw, and that 240 additional beds are urgently needed.

THE same paper announces the death at Nalentschow of Dr. Nowizki, formerly physician to the mineral water establishment at Lipezk, and well known in Polish medical literature.

WE understand that Dr. Robert Fowler of Bishopsgate is a candidate for the Surgeoncy to the City Police, vacant by the resignation of Mr. George Borlase Child.

THE death is announced of Dr. Aeby, lately Professor of Anatomy at the University of Berne, which he had recently quitted to hold a similar office at Prague.

PROFESSOR MERKEL of Königsberg has received a "call" to Göttingen to succeed the late Professor Henle.

ROBERT H. MOORE, F.R.C.S.I., has been appointed Surgeon-Dentist in Ordinary to His Excellency the Lord Lieutenant.

A CONGRESS of Russian alienist physicians will be held in Moscow in September.

Public Health and Poor Law.

LOCAL GOVERNMENT DEPARTMENT.

REPORTS OF MEDICAL OFFICERS OF HEALTH.

Ulverston (Urban).—Dr. Thompson, in his report upon the health of this district in 1884, estimates its population at 10,000 persons, which signifies that it has remained stationary since the last census, although the population increased from 7607 to 10,008 in the ten years 1871-81. The births registered last year, calculated upon this estimate of the population, were equal to a rate of 38·8 per 1000, showing at any rate that in all probability the population is not over-estimated. It may be noted that if the population of this district had increased since 1881 at the same rate as prevailed between 1871 and 1881 (which it certainly has not) it would now exceed 11,000. The deaths registered in the district last year were 155, and were fewer by 59 than the number in 1883. These deaths were equal to a rate of 15·5 per 1000 of the medical officer's estimate of the population, and was lower than the rate in any recent year. The union workhouse is situated within the district, and it is said that "the death-rate is materially affected" by this fact. It is beyond doubt that a considerable proportion of the deaths in the workhouse are of inmates not belonging to the sanitary district, but admitted from other parts of the union. As, however, the death register records the previous residence of persons dying in institutions, there should be no difficulty in excluding deaths not belonging to the district. That the remarkably low death-rate in the district in 1884 may be accepted as trustworthy evidence of satisfactory health condition may safely be assumed from

the following corroborative facts. The deaths of infants did not exceed the proportion of 10·5 per cent. of the births registered; and the death-rate from the principal zymotic diseases was only 0·8 per 1000 of the estimated population. The sewerage and its ventilation appear to have been improved during the year; and the water-supply is reported to be constant, of a satisfactory character, and to have been more extensively adopted, although the source of supply in some outlying parts of the district is still of a dangerous character.

Huddersfield Urban District.—This borough had in 1884 a lower death-rate than in any preceding year—namely, 19·5 per 1000. Whooping-cough, a disease against which the application of sanitary and preventive measures appear thus far to be all but useless, was very fatal; and during the third quarter of the year diarrhœa in children caused a large mortality. In Huddersfield the relation of this diarrhœa mortality to meteorological conditions has been by no means constant, but the long drought and extreme heat of 1884 must be regarded as having materially influenced the deaths from this cause. In so far as drought interfered with the efficient flushing of drains, this was to a great extent remedied by artificial flushing wherever a fatal case of diarrhœa was heard of; and, apart from this, a large amount of such flushing was carried out. Indeed, it is evident from what Dr. Cameron says on this subject that he rightly attaches great importance to systematic sewer-flushing, not only as to diarrhœa, but with respect to the prevention of other diseases, and notably to enteric fever. The system of compulsory notification would appear to progress satisfactorily, supplemented as it is by excellent provision for the isolation of infectious diseases and by systematic house-to-house inspection.

Liverpool Urban District.—This city, like some others, recorded its lowest death-rate in 1884, but even this low rate for Liverpool reached 25·1 per 1000; and the decrease in deaths, which was mainly effected in the saving of life from lung diseases, is admittedly regarded as having been largely due to the accident of increased temperature during the year. The same condition led, however, to an increase in the diarrhœa deaths, the fatal attacks numbering 841, as opposed to an average of 761 during the ten previous years. Considering the increase of population in progress, this is not a large augmentation; but its significance is considerable in view of the risk of cholera importation, and of the fact, noted by Dr. Stopford Taylor, that the incidence of cholera is identical with that of diarrhœa, the greatest mortality being in the lowest, dirtiest, most crowded, and most squalid streets. Liverpool, having deferred the question of the provision of means of isolation until a moment of panic from small-pox, finds itself precisely in the position that might have been anticipated. The cost of the hurried temporary provision has been made the ground for declining to enter into the question of making permanent accommodation, just in the same way as it has elsewhere; and without doubt there is much force in the objection which some people have to any temporary erections whatever, except by way of supplementing permanent hospital provision. In the long run temporary hospitals, as a rule, do more harm than good, by putting off the provision of permanent accommodation, and by saddling the districts concerned with arrangements admittedly incomplete. We must, however, concede that the temporary provision made in Liverpool for small-pox is of an exceptionally excellent character, and it affords a strong indication of the admirable arrangements that probably would have been carried out if ample provision for all infectious cases had been made by the Corporation at a time when they were free from panic and hurry. The energy of the present sanitary administration may be judged of by the circumstance that some twenty pages of the report under consideration are taken up with a description of the names of houses and streets that are deemed to require demolition, and it is much to be hoped that the Corporation will find themselves able to face the gigantic task their predecessors have delegated to them in this respect.

Cardiff Urban and Port Districts.—Dr. Paine commences his annual report for 1884 by a detailed account of the local meteorological conditions of the year, and he then refers to the principal sanitary circumstances, noting especially the need for improvements in the sewerage, and this especially in so far as ventilation is concerned. The state of the house drains is also most imperfect, and the authority as well as the inhabitants would do well to study the diagrams as to this, shown in Knight's Annotated Edition of the Model Bye-laws of the Local Government Board. The remedies there pointed out as applicable to all sorts of houses would go far to remove those conditions which are indicated in the report to be so often associated with occurrences of enteric fever and diphtheria. Cardiff has certain hospital provision, and made good use of it during the past year. The general death-rate for the year reached 24·0 per 1000. As to Cardiff Port, the most interesting feature relates to the story of the arrival of a cholera-infected ship, the *Abissinia*, the isolation of the sick and suspected in a hospital which had fortunately been prepared in advance on the Flat Holmes Island, and the ultimate burial at sea of one fatal case of cholera. The preparedness of Cardiff, both in the matter of hospital as also in respect of the sanitary organisation needed to cope with such circumstances, very possibly saved this country from a grave evil, and the arrangements may well be taken to afford an excellent example to other port and riparian authorities not equally well provided with the means of warding off a danger which, though primarily a local one, may at any moment be national. The work of port inspection seems to be well carried out at Cardiff, and much advantage must result both to the town and to the crews of the vessels concerned.

VITAL STATISTICS.

HEALTH OF ENGLISH TOWNS.

IN twenty-eight of the largest English towns 5506 births and 3126 deaths were registered during the week ending the 11th inst. The annual death-rate in these towns, which had been so low as 17·6 and 18·0 in the preceding two weeks, further rose last week to 18·3, which was, however, considerably below the average for the season. During the first half of this year the annual death-rate in these towns averaged 21·3 per 1000 against 22·8, 22·7, and 21·0 in the corresponding periods of the three years 1882-84. The lowest rates in these towns last week were 12·2 in Derby, 13·5 in Halifax, and 13·7 in Bolton. The rates in the other towns ranged upwards to 24·0 in Plymouth, 24·2 in Newcastle-upon-Tyne, and 25·8 in Manchester The deaths referred to the principal zymotic diseases in the twenty-eight towns, which had been 448 and 474 in the preceding two weeks, further rose last week to 501, the increase being mainly due to the greater mortality from diarrhœa, mainly infantile. These 501 deaths included 141 from measles, 104 from whooping-cough, 32 from "fever" (principally enteric), 30 from scarlet fever, 19 from diphtheria, 14 from small-pox, and 161 from diarrhœa. No death from any of these zymotic diseases was registered last week in Oldham, whereas they caused the highest rates in Salford, Liverpool, and Manchester. The greatest mortality from measles was recorded last week in Liverpool, Manchester, and Salford; from whooping-cough in Plymouth, Manchester, and Blackburn; from scarlet fever in Newcastle-upon-Tyne; from "fever" in Norwich and Portsmouth; and from diarrhœa in London and Leicester. The 19 deaths from diphtheria in the twenty-eight towns included 15 in London. Small-pox caused 25 deaths in London and its outer ring of suburban districts (exclusive of 12 of London residents recorded outside London), and but 3 in the twenty-seven provincial towns. The number of small-pox patients in the Metropolitan Asylum Hospitals situated in and around London, which had declined in the preceding five weeks from 1389 to 859, further fell to 780 on Saturday last; 101 cases were admitted during last week, against numbers declining from 282 to 94 in the previous seven weeks. The Highgate Small-pox Hospital contained 49 patients on Saturday last, 7 cases having been admitted during the week. The deaths referred to diseases of the respiratory organs in London, which had been 183 and 192 in the preceding two weeks, declined last week to 177; they were fewer than in any previous week of this year, and were 31 below the corrected weekly average. The causes of 60, or 1·9 per cent., of the deaths in the twenty-eight towns last week were not certified either by a registered medical practitioner or by a coroner. All the causes of death were certified in Birmingham, Leicester, Nottingham, and in seven other smaller towns. The largest proportions of uncertified deaths were registered in Birkenhead, Oldham, and Sheffield.

HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been equal to 20·8, 20·4, and 19·2 per 1000 in the preceding three weeks, further declined to 19·0 in the week ending the 11th instant; it was, however, 0·7 above the mean rate during the same week in the twenty-eight large English towns. The rates in the Scotch towns last week ranged from 14·4 and 15·6 in Leith and Edinburgh, to 21·2 in Greenock and 24·6 in Paisley. The 463 deaths in the eight towns included 20 which were referred to diarrhœal diseases, 19 to whooping-cough, 8 to scarlet fever, 6 to "fever," (typhus, enteric, or simple), 4 to measles, 3 to diphtheria, and not one to small-pox; in all 60 deaths resulted from these principal zymotic diseases, against 48 and 57 in the preceding two weeks. These 60 were equal to an annual rate of 2·5 per 1000, which was 0·4 below the mean rate from the same diseases in the twenty-eight English towns. The deaths attributed to diarrhœa showed a further increase upon recent weekly numbers, and exceeded the number in the corresponding week of last year by 7. The fatal cases of whooping-cough, which had been 14 and 21 in the preceding two weeks, were 19 last week, of which 14 occurred in Glasgow. The 8 deaths from scarlet fever corresponded with the number in the previous week, and included 6 in Glasgow. The deaths referred to "fever," which had been but 3 and 1 in the previous two weeks, rose to 6 last week; 4 occurred in Glasgow. Two of the 4 fatal cases of measles and 2 of the 3 of diphtheria were also returned in Glasgow. The deaths referred to acute diseases of the respiratory organs in the eight towns, which had been 94, 74, and 69 in the preceding three weeks, further declined last week to 61, and were 22 below the number returned in the corresponding week of last year. The causes of 65, or 14 per cent., of the deaths in the eight Scotch towns last week were not certified.

HEALTH OF DUBLIN.

The rate of mortality in Dublin, which had been equal to 27·5 and 29·6 per 1000 in the preceding two weeks, declined to 22·6 in the week ending the 11th inst., and was lower than in any previous week of this year. During the thirteen weeks of last quarter the death-rate in the city averaged 30·0 per 1000, the rate during the same period not exceeding 19·3 in London and 18·1 in Edinburgh. The 153 deaths in Dublin showed a decline of 47 from the number returned in the previous week, and included 19 which were referred to the principal zymotic diseases, against 31 and 24 in the preceding two weeks; 5 resulted from diarrhœa, 4 from "fever" (typhus, enteric, or simple), 4 from measles, 4 from scarlet fever, 2 from whooping-cough, and not one either from small-pox or diphtheria. These 19 deaths were equal to an annual rate of 2·8 per 1000, the rate from the same diseases being 3·6 in London and 1·2 in Edinburgh. The fatal cases both of scarlet fever and whooping-cough showed a considerable decline from the numbers in the previous week, while those of "fever" showed no variation. The deaths from measles showed an increase of 1, and those attributed to diarrhœa exceeded the number in any recent week. Six inquest cases and 3 deaths from violence were registered. The 47 deaths in public institutions showed a decline from the numbers in recent weeks. The deaths both of infants and of elderly persons were fewer than in any previous week of this year. The causes of 21, or nearly 14 per cent., of the deaths registered during the week were not certified.

THE SERVICES.

The Queen has approved of the Good Service Pension of £100 per annum, vacant by the death of Sir W. Muir, being bestowed upon Surgeon-General W. Mackinnon of the Army Medical Staff, who has seen much active service.

Among the officers who arrived at Cairo from the Upper Nile on the 8th inst. was Surgeon R. Porter.

The following officers of the Nile force left Cairo invalided for England on the 9th inst.:—Surgeons M. O'D. Braddell, J. A. Smith, R. Haselden, C. W. Johnson, L. W. Swabey, W. H. P. Lewis, and F. J. Jencken.

ADMIRALTY.—The following appointments have been made:—Surgeon H. F. D. Stephens, to the *Wrangler*, his appointment to the *Grappler* being cancelled; Surgeon Herbert W. A. Burke, to the *Grappler;* Surgeon Herbert E. Marsh, to the *Excellent;* and Mr. Evan Thomas Hughes, to be Surgeon and Agent at Holyhead.

RIFLE VOLUNTEERS.—24th Middlesex (Post-office): J. D. Grant, Gent., M.D., to be Acting Surgeon.

Correspondence.

"Audi alteram partem."

THE CASE OF DR. WARBURG.

To the Editor of THE LANCET.

SIR,—Some years ago I appealed through the press on behalf of Dr. Warburg, to whom the people who serve in malarious climates are indebted for a most powerful febrifuge known to the medical profession, and which has saved many valuable lives. I have before me a letter from the lamented General Gordon, dated Khartoum, October 25th, 1876, when Governor of the Soudan, addressed to Dr. Warburg, in which he says: "I am (D.V.) coming home on leave (it would be for good were it not for your medicine, but I have such confidence in it that I look on returning with no dread), and will give you an order for £20 worth." I urged Dr. Warburg to make its composition known. In compliance with this advice, Dr. Warburg came to Netley, and in the laboratory there made up a large quantity of his tincture, giving me at the same time his formula for publication, which I made known to the profession in the pages of THE LANCET and *Medical Times*. I regret to say that this well-intended act of mine was followed by disastrous results to the inventor. It is now made and sold by druggists without any profit to Dr. Warburg, and I invite such of your readers who have derived benefit—perhaps had their lives saved—by this remedy to assist the man who has given to tropical medicine a powerful weapon to contend with a disease that kills twice as many victims as cholera and small-pox put together. The Government of India some time ago took the very unusual step of marking their sense of the value of Warburg's tincture by a grant of £200 to the discoverer. Dr. Warburg is now upwards of eighty-one, and is in embarrassed circumstances.

The following gentlemen will be happy to receive contributions:—The Rev. Fredk. Chalmers, B.D., Nonington Vicarage, Wingham, Kent; Major-General Fredk. Cotton, C.S.I. (late R.E.), 13, Longridge-road, S.W.; Captain Ralph N. Taylor, E.I. United Service Club, St. James's-square.

I am, Sir, yours truly,

W. C. MACLEAN,
Inspector-General (retired), late Professor of Military Medicine, Army Medical School, Netley.

28, Carlton-crescent, Southampton, July, 1885.

"FEAR OF FALLING OVER THE 'KHEED' DISEASE," AND FASCINATION.

To the Editor of THE LANCET.

SIR,—With regard to the announcements of Alpine accidents that usually appear about this time every season in the papers, will you allow me to throw out a hint or two anent them that have just occurred to me. One of the latest of these was a very startling one. A gentleman, who had attained the proud position of vice-president of the French Alpine Club, and who must accordingly be assumed to have achieved considerable repute for his mastery of this kind of experience and adventure, has just been found dead with his two guides at the foot of the Glacier du Col d'Argentière. The guides were, we are further told, "two of the most experienced men in Chamounix." But later research would seem to imply something more than mere bravado or rashness on their part; and this is the feature of the case with which I am most concerned here.

I met at Serimiggur, during my visit to that city several years ago, a gentleman who had just come into the Valley of Cashmere by the Guzerat and Bimbur route over the well-known Pir-Punjal range. He had a somewhat startled appearance when I first saw him; his servants had, I think, some doubts about his sanity, and it was only after some pressure or "pumping" that I could induce him to acknowledge that he had been horribly frightened on the way; he,

in short, assured me, with a somewhat troubled air, that he had felt an almost insuperable desire to throw himself into or down one or more of the gorges ("kheeds," he called them); and he added that nothing—"no," he emphatically said, "not all the gold the world could hold"—would induce him to go back the same way again. He anxiously interrogated me, at the same time, about the "kheeds" or ravines of the Murree route, by which I had marched; and when I told him that the Pir route was by far the wilder or more picturesque of the two—"Yes," he said, with some bitterness, "that's just it; 'tis a d——d sight too wild for me. I was within an ace of pitching myself head-foremost into ——" (naming one of its gorges). I have also met one or two others who suffered from this strange feeling or disposition. A gentleman—a rising solicitor—assures me, as I write this, that he once felt an inclination of this kind while standing on a high bridge, and he ascribed this impulse to an instigation of the devil. I told him that there was no more "accounting" for beliefs than there was for tastes in this world, and that if he would look nearer home—viz., into his digestive apparatus—he would probably find the cause of this impulse to be some passing derangement of his duodenum.

Recounting some of his adventures in Persia, and after describing the dimensions of "a horrid ravine" near which he and his party had to pass, Mr. Arthur Cavanagh says ("The Cruise of R.Y.S. *Eva*," p. 172): "We were getting tolerably high up, when a halt occurred, occasioned by one of our number losing his head, as 'tis called. . . . He declared his inability; his firm conviction was that he should throw himself over the brink" of the horrid ravine aforesaid; and I have read of some similar instances elsewhere. It is akin, I suppose, to that rare condition, agoraphobia, that has been recently brought under notice in your columns.

As to the "fascination" referred to above—the analogue of which would be, I assume, in medical parlance, sensational paralysis or nervous shock—I contributed a letter on the subject some years ago to *Nature*, which elicited several illustrations in point; others will perhaps occur to your readers, and meanwhile the following excerpts may help in the search. Describing the death by falling with his horse over a ravine in the Himalayas of a certain person, the late Mr. Wilson says in his interesting article, "The Abode of Snow" (*Macmillan's Magazine* for November, 1874, p. 561), that "an eye-witness of another of these frightful accidents told me that when the horse's hind foot got over the road it struggled for about half a minute in that position, and the rider had plenty of time to dismount safely, and might easily have done so; *but a species of paralysis seemed to come over him*—his face turned deadly white, and he sat on the horse without making the least effort to save himself, until they both went over backwards." And if a healthy man is thus affected, need we be surprised when we hear that some one of his weaker sisters have gone over the "kheed" (as the saying is), and been picked up, dead or dying, at its bottom? More than one lady has, I fear, thus lost her life in the Himalayas, and it may be that some members of even the sterner sex have been equally unfortunate.

Dwelling on some of the effects that were produced by the proximity of a shot or shell at the memorable siege which he has chronicled so well, Drinkwater says ("History of the Siege of Gibraltar," p. 75): "Lieutenant Lowe lost his leg by a shot on the slope of the hill under the Castle. He saw the shot before the fatal effect, *but was fascinated to the spot. This sudden arrest of the faculties was not uncommon. Several instances occurred to my own observation* where men totally free have had their senses so engaged by a shell in its descent that, though sensible of their danger, they have been immediately fixed to the place. But what is more remarkable," he continues, "these men have so instantaneously recovered themselves on its fall to the ground as to remove to a place of safety before the shell burst;" and this rapid realisation of their danger would seem to show that the reasoning faculty, as well as the consciousness were equally in abeyance for the time being.

Again, describing the painful scenes and surprises that preceded their first "casualty" at the defence of the entrenchment at Cawnpore in 1857, Mowbray Thomson, one of its few survivors, says ("The Story of Cawnpore," p. 66) that "several of us saw the ball bounding towards us, and he [McGuire] also evidently saw it; *but, like many others whom I saw fall at different times*, he seemed fascinated to the spot;" and though this condition readily lends itself to the purposes of fiction, I know just now of no instance in which any such use has been made of it. This allusion to its existence may possibly open a way for its employment in this direction in the near future, and meanwhile we may, I suppose, include it in that category of nervous derangements which embraces trance, ecstacy, and other kindred conditions of that kind.

I merely mention these occurrences to call attention to the curious phenomena here referred to, and give it as my opinion that they play a larger part in the production of accidents—Alpine and otherwise—than is generally supposed. Speaking for myself, I know of no more helpless or bewildering condition than that of a person who finds himself suddenly on the brink of a precipice which he can neither cross nor skirt without danger. A very similar remark will apply to an unbroken expanse of snow or ice, and I can even now recall, as if it were yesterday, the feelings of helplessness and dismay with which I contemplated such a scene several years ago in the region of everlasting snow, near the Sacred Cave of Ummernath, in the Himalayas, 16,000 feet above the sea-level. Seven of the pilgrims with whom I was returning from this expedition perished *en route*, and I now fully believe that all these casualties were not due to privation, exposure, or any of the other difficulties of the journey. How far, however, the conditions specified influenced them I am unable to say, as I had enough to do at the time to take care of myself and my servants; but that they ought to be taken into account in this connexion I am satisfied, and this is perhaps as much as ought to be said of them in the present state of our ignorance or knowledge of the facts that surround or the physiology that underlies them.

I am, Sir, your obedient servant,

Auriol-road, West Kensington, July 14th, 1885. WM. CURRAN.

CONVOCATION AT LONDON UNIVERSITY.

To the Editor of THE LANCET.

SIR,—I must ask you, in justice to myself and the overwhelming majority who supported the resolution which I had the honour to move at the recent meeting of Convocation, to allow me to explain what, after your leader of last week, might create an erroneous impression upon your readers. That my argument was "unfortunate," my statements "mistaken," and my taste "worst" of all, are opinions which it would be idle to controvert, seeing how widely "tastes differ." That the statements are reported with singular inaccuracy, and that the argument was sufficiently convincing to commend itself to an enormous and enthusiastic majority, who regarded the matter in anything but the light of a "merely academical resolution." At the same time, I trust I am sufficiently grateful for the consideration you have extended to me on the score of youth and inexperience. My remarks had no reference whatever to the proposed reform of the University which is coming forward at the next Convocation, except in so far as I suggested that the question of reform and the proposed teaching university should be kept entirely apart from the agitation that has been worked up against the Preliminary Art and Science Examinations. The Senate has been asked by the Metropolitan Counties' Branch of the British Medical Association to reduce the severity of these two examinations, and was ominously threatened that should this request be denied steps would be taken to establish a rival to the London University, where the standard of qualification would be subordinated to the number of graduates turned out. That this dreadful threat is likely to be carried out, and the London University deprived of those whom she never desired to call her own, appears probable from the lamentation of your contemporary that "it is impossible to avoid the suspicion that no modification of the University of London will ever bring its degrees within the range of the majority of the medical students of London."

To say that the London University lacks influence "over the great schools and teaching bodies in England" is surely extravagant, when the work she has done in the past, in leading the way to a higher standard and more practical knowledge in every faculty, has gained the respect, admiration, and the sincerest flattery of other universities content to follow in her train. It is not jealous self-interest that has induced her graduates to resist the atttacks that have been made almost exclusively

on her medical degrees, but the consciousness that her mission is a special one is based on the preference of a high qualification—dearly bought it may be, but dearly valued too—to the glory of mere numbers, and a feeling that if she is to add the function of teaching to that of examining the demand for the reduction of the standard comes peculiarly inopportune. I am, Sir, yours faithfully,

W. J. COLLINS, M.D., B.S., B.Sc. Lond.

Albert-terrace, Gloucester-gate, July 14th, 1885.

*** In his reference to Lord Justice Fry as desirous of "lowering the standard for medical degrees," Dr. Collins was "mistaken," and if his arguments were "unfortunate" enough to have been supposed to refer to the graduates who are anxious for a reform of the University rather than to an outside agitation, he has only himself to blame. Tastes can hardly differ as to Dr. Collins's attack on Dr. Bristowe. To speak of such a man as "obtaining all he could desire" from his *alma mater*, and as "fouling his own nest," quite justifies our remark. The opinions of the most eminent scholastic authorities on the matriculation and the examination for non-medical degrees fully bear out our opinion on the position of the University.—ED. L.

EXPOSURE OF THE INFERIOR DENTAL NERVE FOR THE PURPOSE OF STRETCHING OR EXCISION.

To the Editor of THE LANCET.

SIR,—In the current number of THE LANCET Dr. Francis Grant publishes an interesting case of facial neuralgia treated by excision of a portion of the inferior dental nerve. I would point out that the method adopted by him of exposing the nerve, attended as it is by a wound and subsequent scarring of the cheek, division of the buccal branch of the facial nerve and the fibres of the masseter muscle, and trephining of the lower jaw, is an unnecessarily severe operation, as the nerve can be readily and simply exposed from within the mouth. It is only necessary to make an incision through the mucous membrane over the ramus of the jaw, and to separate the fibres of the internal pterygoid muscle from the bone with the finger. The nerve can then be readily hooked up by an aneurysm needle with a short curve, the small tongue of bone at the entrance to the dental foramen serving as a guide to it. I have exposed and stretched or divided the inferior dental nerve in this way on five or six occasions with ease. I have had no trouble with the inferior dental artery, and the wound in each instance has healed in a few days. The superiority of this method of exposing the nerve over that adopted by Dr. Grant must be sufficiently obvious.

I am, Sir, yours truly,

Weymouth-street, W., July 12th, 1885. W. J. WALSHAM.

CASE OF HYSTERO-EPILEPSY.

To the Editor of THE LANCET.

SIR,—The following case, bearing on a debated point, may be of interest.

Mary M——, aged eighteen, has been subject since her eleventh year to convulsive and non-convulsive attacks. The latter variety are described as a state of darkness, giddiness, and confusion of ideas, suddenly developed, rapidly passing away. The former begin somewhat similarly, then, unconscious, the patient falls, convulses, foams at the mouth, her release being heralded by gesticulations and emotional outbursts. For some time after the attack the right leg feels weak. This girl, in whom hitherto these seizures have occurred singly, at intervals of weeks or months, has just passed through a series of convulsive paroxysms, constituting a hystero-epileptic acme extending over a week. Each paroxysm lasts from ten to twenty minutes, the remissions averaging about ten minutes all day, and two or three hours during the night. The attacks proceed thus. The pupils dilate, the head turns to the left, there is nystagmus and convulsive movements of the eyelids; head now turns to the right, and tonic convulsions occur throughout the body, most violent on the right side, the face included, which gets slightly cyanosed, foam issuing from the mouth. The body twists to the right, the head most, the convulsions getting clonic. Pulse 130, increasing in force; temperature 99·5° F. Convulsions now become very hysterical, patient clutches at her hair, and attempts to get out of bed. The attack terminates with scolding, weeping, and vomiting. During the remission the patient is more or less delirious, but complains of headache. Pulse 120; temperature normal. Functions of sensorium greatly exalted. Transitory foot-clonus. Optic papilla normal.

The view that there is no true epilepsy in such a case as this is supported by the fact of there being but a slight increase of temperature during the whole acme, never exceeding 99·5° F.; from the possible modification of the attacks by compression over the ovaries, and from there being certainly no impairment of the intellect subsequent to the acme. But it is to be noted that the patient denied the existence of any hysterical aura in the epigastrium; that vomiting and retching always followed the fits; and that the patient used to experience the sensations of *petit mal* and epileptic vertigo. I am, Sir, yours truly,

Wick, N.B. A. G. AULD, M.B.

"THE TRAFFIC IN GIRLS."

To the Editor of THE LANCET.

SIR,—My authority for the statement controverted by Mr. Harrison Cripps in your issue for July 4th is the Rev. J. W. Horsley, M.A., chaplain of H.M. Prison, Clerkenwell.

I am, Sir, yours truly,

Paternoster-square, E.C., July 13th, 1885. JAMES B. WOOKEY.

LUNACY LAW AMENDMENT.

To the Editor of THE LANCET.

SIR,—As it now appears certain that the Lunacy Acts Amendment Bill will not be proceeded with during the present session of Parliament, and that the hopes which have been raised of some kind of settlement of much-vexed and difficult questions by its means are not to be speedily realised, it seems incumbent upon the Legislature, in the interests of public safety, to take immediate steps to render the existing Acts once more operative. It is well known that for some months past they have in a great measure ceased to be so, and a kind of deadlock has existed, the result of prolonged agitation, and certain recent judicial decisions. Workhouse officials refuse to receive persons of unsound mind, because it seems to them doubtful whether they can do so legally; those unfortunate persons, thus refused admission, are therefore cared for, and their maladies treated, in police-cells and prisons. Members of the medical profession, with a laudable desire to avoid the possibility of vexatious and ruinous litigation, have of late, it appears, almost unanimously resolved to abstain absolutely, in every case of mental unsoundness of whatever kind, from the performance of the duties assigned to them by the Lunacy Acts until they are assured of adequate legal protection while doing so in good faith. The consequences which have ensued from this deadlock, as might be expected, are disastrous. Numerous persons of unsound mind wander at large in our streets, many of them dangerous to themselves and others; meaningless and outrageous assaults by them are of common occurrence; the friends and relatives of these persons and the public are annoyed, threatened, and rendered anxious in a thousand ways by their erratic proceedings, which they are powerless to control; whilst the records of coroners' and criminal courts throughout the kingdom tell an appalling and unmistakable tale of increasing preventable murders and suicides by persons described as labouring under 'temporary" or other insanity.

The Bill which has just been withdrawn contained provisions which, if passed into law, would have effectually overcome the difficulties alluded to,—in the case of workhouses, by Clauses 12, 13, and 14, too lengthy for quotation here, and in that of members of the medical profession by Section 8, whereby it would have been enacted that "a medical practitioner who, in the manner required by this Act, signs any certificate that a person is of unsound mind, shall not be liable to any civil or criminal proceeding for signing such certificate, or for any act done with the view of enabling

the practitioner to sign the certificate, if the certificate is signed and the act is done in good faith."

Without some such legal protection medical practitioners will certainly not be induced to reassume the responsibilities under the Acts which they have cast off. It remains to be seen whether those pressing matters will be dealt with by the present Government in a short Bill, or whether they will be allowed to drift on until the occurrence of some more startling tragedy than usual rouses public indignation.

I am, Sir, your obedient servant,

July 12th, 1885. J. A.

*** We quite agree that the Lunacy Bill now before the the House of Lords should be pushed through its several stages without delay, so as to ensure its passing this session. There is beyond question a deadlock in the arrangements for the care of the insane. Medical practitioners will not sign certificates at present. We earnestly counsel them not to do so. No difficulty can possibly prove insuperable in the passing of a fairly good measure. The amendments necessary to make the present Bill a good one are not of a nature to cause much opposition. If the Government will afford reasonable facilities for the progress of Lord Selborne's Bill, they will be simply doing an act of justice to the ex-Lord Chancellor, and rendering the community at large an important service.—ED. L.

MANCHESTER.

(From our own Correspondent.)

OPEN SPACES.

NEARLY twelve months ago a proposal was set on foot for the acquisition by the Corporation of a large piece of ground known as the Polygon, in Ardwick, to be kept open and used as a recreation-ground for the public at large. Considerable opposition was, however, made by a few persons to the expenditure of public money at a time when trade is said to be in so depressed a state. In order to meet the objection, and to save the project from falling through, a number of public-spirited citizens subscribed no less a sum than £9000, or something like half the total amount required, and this they offered to the Corporation more than six months since. The latter, however, have apparently been deterred from carrying out the project by a ratepayers' association, and as they cannot come to any decision, the offer of the £9000 has now been withdrawn, and it is to be feared the open space in question will eventually find its way into the hands of the omnivorous builder.

OWENS COLLEGE.

At the annual distribution of prizes, amongst others there were awarded four scholarships, offered by a committee of subscribers to female students entering on a degree course for graduation in the Victoria University. At the recent conferring of degrees of this university, which took place at the Owens College, no ladies appeared; but it is not unlikely that next year some will be found amongst the graduates. The degrees which were conferred by the Vice-Chancellor were those of M.A., M.Sc., B.A., and B.Sc. As yet no medical degrees have been granted by the youngest of our universities. At the meeting of the Council Dr. Cullingworth was appointed professor of obstetrics in place of the late Dr. Thornburn. This will render vacant the lectureship on medical jurisprudence which has been held by Dr. Cullingworth since the decease of Mr. Morley Harrison. It is expected that at the next meeting Dr. H. Young will be appointed to the chair of anatomy.

ROYAL INFIRMARY.

The vacancy of obstetric physician at the Infirmary will in all probability be filled by the appointment of Dr. Lloyd Roberts, of St. Mary's Hospital, as his qualifications and influence are much greater than any other local candidate. At the last meeting of the Infirmary Board it was stated that the small-pox outbreak was nearly at an end, and some statistics were given as to the mortality among the vaccinated and the unvaccinated cases. Amongst the former it was only 3·5 per cent., whilst amongst the latter it was 54·5 per cent.

ISOLATION OF INFECTIOUS DISEASES.

The question of the provision of hospital accommodation for infectious diseases, which has been more or less unsettled during the past few months, appears to be definitely settled. Hitherto this has been found by the Manchester Royal Infirmary, but it has been objected by some, that as a charitable institution it was not part of its work to do this, but that it should devolve upon the legally constituted health authorities. These latter, whilst content to partially pay the former for doing this work, have been objecting to them keeping any profit which might accrue, and at one time it seemed likely that, following the example of Edinburgh, the Infirmary would transfer their fever hospital to the Corporation. But at the last meeting of the City Council it was decided to accept the proposals of the Infirmary Board—viz., that twenty-one shillings per week should be paid with each patient, and that any profits which might arise should be kept apart from the Infirmary funds, and devoted to extensions which are required at the fever hospital.

Amongst the wreck of Parliamentary business caused by the late change of Government, two pieces of legislation of considerable importance affecting Manchester will probably be brought to a satisfactory conclusion. The first, a Bill for extending the municipal boundaries, has all but become law. As a result of this extension the Corporation will have a sewage question to deal with in Rusholme, one of the districts which will become absorbed into the city. The fate of the second Bill—viz., the Manchester Ship Canal, now before a Select Committee—is more uncertain, though its promoters appear to be very sanguine. If perseverance deserves success, then should they succeed, as this is the third time they have been to Parliament at a cost of over a hundred thousand pounds.

LIVERPOOL.

(From our own Correspondent.)

SOME OF THE PAST YEAR'S SANITARY WORK.

AMONG other items of interest in the annual report of the medical officer of health are those which give in detail the work of the sanitary officers and its results. Thus during the year 1884 thirty-eight bodies were removed to the various mortuaries provided by the City Council, such removal being effected by order of the justices on the certificate of the medical officer. Out of a total of 1784 cases of infectious disease removed to hospital, 929 were conveyed by the sanitary officers. These latter comprised 369 of fever, 127 cases of scarlatina, 388 cases of small-pox, 26 cases of measles, 4 cases of diphtheria, 14 cases of chicken-pox, and 1 case of erysipelas. At the disinfecting apparatus 42,458 articles were disinfected, and 1033 were destroyed. The quantity of unwholesome meat destroyed in the course of the year exceeded 82 tons, that of fish was little short of 89 tons. The number of privies which were certified for conversion into waterclosets was 2903; that of visits paid to courts and alleys 122,494, while the number of closets which were found dirty but cleansed during the officer's inspection was 97,728. These figures will give some idea of the enormous amount of work done annually by the sanitary officers.

THE SPREAD OF SMALL-POX.

The danger of the continued prevalence of small-pox in London in spreading that disease to other cities, has been already noticed in THE LANCET, and a local case may now be cited in confirmation of this. A man arrived from London five days ago and commenced with small-pox almost at once. He has been sent by the sanitary officers to the City Hospital for Infectious Diseases at Park Hill.

SHOCKING REVELATIONS AT AN INQUEST.

The county coroner, Mr. Brighouse, held an inquest at Walton-on-the-hill, a local suburb, on the body of a married woman, 64 years of age, who died on the 10th inst. She had fallen out of bed on the 24th June, but refused to have any medical attendance, and was left by her relatives in a very neglected state. On being visited by Dr. Anderson on the 8th inst., at the request of the relieving officer, she was found to

be in a filthy condition, covered with vermin, and the smell of the room was described as poisonous. She refused to go to the workhouse, and though all was done that was possible under the circumstances, she expired two days after. At the post-mortem examination a very large ulcer was found on the back and buttocks, which, with all the surrounding muscles, were in a mortified condition. The scalp was eaten away with vermin. Except the left lung, which was inflamed, all the internal organs were healthy, and the cause of death was the mortification of the back and buttocks. Dr. Anderson described the case as the worst he had ever seen.

EDINBURGH.

(From our own Correspondent.)

PROFESSOR ERICHSEN'S CANDIDATURE.

IN connexion with Mr. Erichsen's candidature for the representation of Edinburgh and St. Andrews Universities, a printed notice has been forwarded to all graduates in and around Edinburgh, informing them that he has acceded to the largely-signed requisition presented to him on the subject, and inviting them to meet him on Thursday in the Freemasons' Hall, Edinburgh, on which occasion he will address the electors. The intimation is signed by Professor Douglas Maclagan, president of the joint Liberal Association of the two Universities. In medical circles in Edinburgh Mr. Erichsen's candidature is cordially welcomed, and here, as in other medical centres throughout the country, an active canvass will be carried out in the interests of the medical candidate, in whose support a considerable degree of enthusiasm has been already awakened. It is greatly to be regretted that several medical men in this city have been induced to look upon the election as a question merely of party politics, instead of recognising it as one which intimately concerns the representation of academic politics; and that they have hence been enlisted prematurely amongst the supporters of the Lord Advocate, who comes forward chiefly, if not solely, on purely party grounds. It is, however, to be hoped that such will appreciate the force of Mr. Erichsen's own remark in his address to the electors published last Saturday, that "all subjects depending upon the relations of science to social welfare, such as those relating to public health in its widest sense, to technical education, and to general culture, ought to receive the constant attention of the representative of a university ..... such a course is the only justification for academic representation." It is also to be hoped that their almost inevitable recognition of this will be accompanied by sufficient academic patriotism to restrain them from entering upon the contest as upon one in which party considerations only are to be entertained.

Edinburgh, July 14th.

BELFAST.

(From a Correspondent.)

EPIDEMIC OF MEASLES IN BELFAST.

DURING the past few weeks we have had a severe epidemic of measles in Belfast. The total number of deaths registered last week was 133, the annual rate per 1000 persons represented by which is 31·6, and of these, 33 were from measles, being 7 over the number of deaths from the same disease in the preceding week. Eight deaths occurred from whooping-cough, and 3 from diarrhœa. The number of births last week in Belfast was 17·6. The death-rate in Belfast during the week ending June 27th was 29·7; during the week ending June 20th, 32·3; and during the week ending June 13th, 30·4. The average annual death-rate represented by the deaths last week in the sixteen principal town districts of Ireland was 28·4 per 1000. The deaths from the principal zymotic diseases in the sixteen districts were equal to an annual rate of 4·5 per 1000, the rate varying from 0·0 in twelve of the districts to 10·5 in Belfast; Belfast thus maintained its unenviable position as the district most affected by zymotic diseases. The high mortality of the present epidemic is mainly due to chest complications.

THE ULSTER MEDICAL SOCIETY.

The annual meeting of the Ulster Medical Society was held in the Belfast Royal Hospital on Tuesday, July 7th. After the reception of the reports the office-bearers for next session were appointed. Mr. John Fagan, one of the hospital surgeons, who occupied the chair during the past session, was re-elected president for the coming year; Dr. Lindsay was appointed secretary. During the greater part of the past session the meetings of this Society were held in the Belfast Museum, which is considered a more convenient place for the majority of the members than the Hospital.

NORTH OF IRELAND BRANCH OF THE BRITISH MEDICAL ASSOCIATION.

The annual meeting of the branch was held in the Royal Hospital, Belfast, on Thursday, July 9th, the president, Professor Cuming in the chair. After the hon. secretary had read the annual report and the financial statement, the meeting proceeded to elect the officers for the ensuing session. Dr. Kidd, of Ballymena, was selected as president for next year, and Dr. Dempsey was re-elected secretary. Dr. O'Neil showed some interesting surgical cases. Dr. H. George read a paper on Stigmata maidis, with notes of two cases of cystitis treated by it. Dr. Spedding showed a large tumour removed from the vulva, and gave an account of the case. Mr. Fagan exhibited a very interesting case of Cancrum oris which he had successfully treated by the local application of iodoform. In the evening the annual dinner was held in the Royal Avenue Hotel, when a large number of medical men were present, Professor Cuming being in the chair. A very enjoyable evening was spent.

PARIS.

(From our Paris Correspondent.)

THE STATE OF THE URINE AFTER NEPHRECTOMY.

AT the meeting of the Academy of Medicine last week, Dr. Polaillon presented a female patient on whom he had performed successfully the operation of nephrectomy, and gave the following history of her case. In examining the urine after the operation, it was noticed that this liquid—which was purulent before the ablation of the diseased kidney—became suddenly clear, and was free from pus-globules. The other kidney produced urine having all the normal characters. Three days after the operation it contained 25 grammes of urea; but it must be observed that on that day the patient scarcely passed a litre of urine. In fact, the exact quantity of urine could not be ascertained for the first few days after the operation, as the patient was then in her courses; but as soon as the menstrual period was over, she passed on an average 124 grammes of urine containing 11 grammes of urea to the litre. This small quantity of urea (the normal quantity passed in the twenty-four hours being 25 to 30 grammes) is in relation to the weight of the patient, which was only 35 kilogrammes. In conclusion, Dr. Polaillon remarked that this case is another example of one kidney alone being sufficient for the excretion of the urea contained in the organism.

THE COMMA BACILLUS.

At the same meeting Dr. Doyen made a statement to the effect that he has constantly found the comma bacillus in the contents of the intestines of choleraic patients; this microbe being found in the duodenum and in the upper portion of the jejunum principally in cases which terminate rapidly. In the more protracted cases it is found in the ileum. Portions of the intestine always contain the comma bacillus associated with other bacteria; it is found disseminated in all parts of the intestine. Fragments of the liver and of the kidney sown in gelatine have produced cultures of the comma bacillus and of some other bacteria. These bacteria are also found in the cut portions of the kidney and of the liver. From this Dr. Doyen concludes that cholera is an infectious and complex malady, consecutive to entero-mycosis, and due to the presence of microbes. On injecting into the stomach of guinea-pigs one cubic centimetre of microbes in eight of alcohol, and in an hour after ten cubic centimetres

of broth containing comma bacilli, nearly all the animals died with symptoms of cholera. Their livers and kidneys furnished cultures of the bacilli.

THE INEFFICACY OF INOCULATION AGAINST CHOLERA.

Dr. Ferrán of Valencia is certainly placed in a most unenviable position, as his inoculations have proved to be perfectly inefficacious. The official report of Dr. Gibier on the one hand, and that of Professor Brouardel on the other, who were sent on two separate missions by the French Government to study the method adopted by Dr. Ferrán to prevent or attenuate the effects of cholera, have been most damaging to his cause. The disease continues to spread, and the death-rate from it among the inoculated and the uninoculated is about the same. Under these circumstances, the Spanish Government has considered it time to put a stop to Dr. Ferrán's experiments, and phials containing the inoculating liquid have been seized and will be submitted to scientific examination. Dr. Ferrán has of course protested against the official reports referred to above, and asserts that he has not kept his method a secret, as he had communicated all particulars concerning it to the Paris Academy of Sciences.

SICKNESS AMONGST FRENCH TROOPS.

Reports from the plains of Pas-des-Lanciers, near Marseilles, on which are encamped about 7000 or 8000 men, to be embarked for Tonquin, give a very sad account of the state of health of these troops. Typhoid fever is raging amongst them, and it is said that even typhus is in their midst. The place is in a most insanitary condition, and this, added to the intense heat of the weather, is the principal cause of the men being so sickly.

THE HEALTH OF M. HENRY MILNE-EDWARDS.

The state of health of M. Henry Milne-Edwards has somewhat improved, but he has been obliged to retire from the Deanship of the Faculty of Sciences of Paris; and M. Jarmin, Professor of Physics at the same Faculty, has been appointed his successor.

THE SOCIÉTÉ FRANCAISE D'OTOLOGIE ET DE LARYNGOLOGIE.

It has been decided that the general annual meeting of the Société Française d'Otologie et de Laryngologie will be held during Easter week. The subjects proposed for next year are: (1) Treatment of the suppuration of the cavity of the tympanum; (2) the local treatment of laryngeal tuberculosis (the ulcerative stage) by surgical means.

Paris, July 14th.

EGYPT.

(From a Correspondent.)

THAT Oriental patients should flock willingly to seek the advice of an English doctor is no new discovery, and in Egypt both during cholera and in less troublous times the poorer natives have willingly filled English out-patient rooms, though they seem to care little about consulting medical men of their own nationality. At Kasrel Aini Hospital, where out-patients were formerly seen by the native house-surgeons, only five or six appeared each day, and these were mostly old cases discharged from the wards. But three months ago Dr. Milton commenced to devote some hours a day to seeing any of the very poor who chose to come to the hospital, which stands outside the town, and to giving instruction to such of the senior students as could attend. The numbers have increased so rapidly that in May there were 831 new cases and 1204 in June, in spite of this being synchronous with the fast of Ramadan, during which the true believer might very reasonably cry to Allah, and postpone his ills to a more convenient season. To avoid the labour of registration each out-patient wears a badge of tin on which his number is written, and by which the prescription of his medicine can be easily discovered. Many of the sick regard this badge with great pride, and treat it as a blessed amulet, while few of them have the faith to continue their attendance if some definite result is not speedily produced. Among the patients some interesting cases of vesical calculus have been lately seen, always operated on by the native professors. Usually there are three or four cases of calculus admitted every month, and median lithotomy is always performed, lithotrity not yet having been introduced into this hospital. Early in June, however, a supra-pubic operation was performed, and the man has made an excellent recovery, having commenced to urinate naturally a few hours after the operation, by which one large calculus and two smaller ones were removed, weighing collectively twelve ounces and a half.

At the autopsy of a man who had died of renal abscess bursting into the peritoneum, the kidney was found to be completely disorganised, with a uric acid stone as big as the distal extremity of a man's little finger lying in the pelvis and blocking the opening of the ureter into the abscess. A second abscess existed in the ureter, which was extremely dilated, and was blocked at its opening into the bladder by a large and very rough uric acid calculus, the size of a walnut. The bladder was much thickened with chronic disease of the mucous membrane, and a third uric acid stone lay in it, about the size of an almond. At another autopsy of a man who had died of chronic dysentery, and had only been in the medical wards for seven days, a large calculus was found lying on the dorsum of the tongue, occupying the fauces, pushing up the soft palate and uvula and displacing the epiglottis. Its shape and appearance exactly resembled a human tongue, with its smooth surface, a few granulations, and its apparent papillæ. It weighed just over an ounce, and measured 2½ in. by 1½ in., being 1 in. thick in its thickest parts.

I lately had the advantage of seeing a native professor of surgery operate upon a man, aged twenty-eight, with elephantiasis of scrotum reaching below his knees. The patient came from Damietta, the most fruitful field for these cases, and he thought the tumour had been four years in growing, but the operator said it was more, probably ten years. He made a central and two lateral and transverse incisions, and found the testicles without a second's hesitation; the left was castrated after a large hæmatocele had been turned out; the right was complicated by a hydrocele, and was carefully preserved. No means were taken to prevent hæmorrhage before the operation, but everything was done with great celerity and promptness. Arteries and veins were ligatured, and silk sutures and a drainage-tube were employed. The weight of the tumour was 31 lb., and to this about 20 lb. must be added for the escaped liquids. A student sat on the operating table at the head of the patient fanning him while he was under chloroform, and all seemed much interested in the operation, especially a black eunuch who was visiting a friend in the hospital and had strayed into the theatre. Fauzi Bey told me this was his twentieth operation for elephantiasis of scrotum, while his junior colleague, Duruy Bey, has done ten. When the patient was safely put to bed, it was interesting to see the operator administering soup to him with his own hand, and performing other nursing services for him, which have now ended in his recovery. The brother of this patient, aged thirty-two, had been operated on twelve years ago for a similar tumour with urinary fistula. The result is a great success, the scar is barely visible, and he is the happy father of children. There is another patient now in hospital with a smaller scrotal tumour, complicated as most of them are with a urinary fistula of ten years' duration.

Small-pox is very prevalent among the black women and children who have recently come here as refugees from Suakin and its neighbourhood, and a small encampment has been formed on the border of the desert, at Abbassiyeh, as an annexe of Kasrel Aini, four miles away. There are to-day forty-eight patients, unvaccinated and confluent, of whom four are dying, while seven others have died during the week. The mothers nurse and tend their sick children without fear for themselves. There have also been several cases of small-pox among the English troops. At the Citadel Army Hospital, two days ago, there were in all 500 patients, including eleven officers and several bad cases of typhoid and chronic dysentery, but of these 160 have just left in a convoy for England, while the final convoy of the Nile Expedition is now daily expected to arrive from the front. Now that the campaign is over, ungrudging praise is bestowed on the medical officers of all ranks, who have worked splendidly together, and can now almost boast that their department is the only one which has not been guilty of some great shortcoming.

The *Unione Medica Egiziana*, published in Alexandria, half in French and half in Italian, has just finished its first

year of existence. It is the only medical publication in Egypt, and therefore deserves encouragement. Its last number reports a case of Dr. Mackie's, at the Deaconesses' Hospital at Alexandria, of a man who had died of septicæmia after purulent cystitis, due to the presence of bilharzia. Cystotomy and thorough cleansing of the bladder seem to be of some use in many cases, but in this instance the man died shortly after the operation. At the post-mortem, the walls of the bladder, kidneys, and liver showed considerable infiltration with the eggs of the parasite. Several small abscesses were found on the surface of the lungs, full of fetid pus, which under the microscope showed the eggs of Distomum hæmatobium. Sections of lung taken from the neighbourhood of the abscesses, and also from apparently healthy parts, showed also the same eggs. There was no congestion or other ordinary disease of the lungs. This is believed to be the first time that these eggs have been discovered in the human lungs.

Cairo, July 7th, 1885.

MEDICAL NOTES IN PARLIAMENT.

Sewers in Westminster.

IN the House of Commons on the 10th inst., in reply to Sir C. Dilke, who asked questions relating to the state of the local sewer and the offensive smells at Westminster, Mr. Balfour stated that he had communicated with the Metropolitan Board of Works and the Westminster District Board of Works on the subject, and that anything which he could do to make them perform their duty would be done.

The Medical Relief Disqualification Bill.

On the 13th inst. Mr. Balfour brought in a Bill to abolish disqualification for the receipt of medical relief—disqualification, not merely in elections of parliamentary representatives, but also in municipal elections, School Board elections, and the like. The only exception is in the election of guardians. After a lengthy and animated discussion, in which several members took part, the Bill, which is retrospective, was read a first time.

On the 14th inst. Mr. Balfour, in reply to Mr. Heneage, said it was under his consideration to introduce in the Bill some provision by which voters labouring under disqualification for having received medical relief, shall be as far as possible relieved from that disqualification in the event of the Bill passing. In reply to Mr. Salt and Mr. J. Talbot, Mr. Balfour stated that he hoped on the second reading of the Bill to be able to state the number of persons in England and Wales who were in receipt of medical relief charged upon the rates, without being recipients of relief under the Poor Laws in any other form. This information would be entirely derived from the inspectors of the Local Government Board.

Poisonous Patent Medicines.

In reply to Mr. Warton, Sir H. Holland stated that the Government do not intend to proceed with the Bill relating to poisonous patent medicines introduced in the House of Lords by their predecessors. It has been arranged, however, so to alter the stamp as to make it plain that there is no Government guarantee of the medicine. The stamps will in future contain the words "This stamp implies no Government guarantee." Specimens had been submitted to, and approved by, his predecessor, and the engraver to the Inland Revenue is now engaged upon the preparation of the requisite plates. It is expected that the new plates will be completed, and the present stock of old stamps exhausted within two months from now.

The Case of Dr. Bradley.

On Thursday, Mr. Macfarlane asked the Secretary of State for the Home Department if his attention had been called to a memorial addressed to the late Home Secretary by a large number of medical practitioners of Sheffield and other places, having reference to the case of David Bradley, M.D., who was sentenced to two years' hard labour for an alleged outrage upon a woman named Sweetmore, who was subject to epilepsy; and if the facts were as stated in the memorial, he would order an immediate inquiry into the case.—Sir R. Cross replied that in this case a number of memorials had come to hand quite recently, and the case was at the present moment the subject of the most careful investigation.

Obituary.

HOWARD BENDALL, M.D. EDIN., M.R.C.S. ENG.

IN Howard Bendall, whose death at the early age of thirty-two we recently announced, medicine has lost one of her most promising sons. For some time past he has been in very indifferent health. Whilst holding the appointment of house-surgeon in Queen's Hospital, Birmingham, he suffered from a poisoned wound of the hand. Shortly afterwards it was found that his lungs were affected, and he was recommended by Dr. Andrew of Birmingham to take a sea voyage. His health was so much benefited by this that he spent part of the winter of 1883 on board the *British India*. On this second voyage he contracted malarious fever, which never left him, and which caused him more suffering than the lung disease. In February of this year he was on board the *El Dorado* when she was wrecked off Lisbon, and he there sustained a shock, brought on by exposure and anxiety, which, though he made light of it, undoubtedly hastened his death, which took place on the 18th of June. Howard Bendall as a boy manifested a great love for natural history, which afterwards became a perfect passion with him. He was educated at a private school, and owing to the death of his father he entered upon a mercantile career, laying aside for a time his intention of studying for medicine. In 1876, however, he resumed his original intention, and entered as a student of medicine at University College, where he gained a silver medal for chemistry. Before taking his diploma of membership of the Royal College of Surgeons he entered as a student at Edinburgh University, taking both his M.D. C.M. Ed. and M.R.C.S. Eng. in 1880. In his last year of study he gained several bronze medals, amongst them the senior medal for clinical surgery. After graduation, Dr. Bendall was appointed house-surgeon in the Perth Infirmary, where he carried on his researches on "Acute Farcy in Man," the results of which, presented as a graduation thesis for the degree of M.D. Edin., gained for him a gold medal, the highest honour the University could confer, and he was at the same time awarded the Syme Memorial Surgical Fellowship. This thesis, which was published in the Transactions of the Pathological Society in 1882, at once stamped him as one of the most promising of British pathologists, and had life and health been continued to him, Dr. Bendall must soon have taken rank amongst the foremost men of his time. Only those who knew him intimately could appreciate him fully. With a bright, keen intellect and great individuality he combined a culture both broad and deep. Never obtruding his opinions unasked, he was always ready with advice and suggestion to those who sought them from him, and many men of his year remember with gratitude the timely help which he, as a somewhat older man, was often able to give.

Dr. Bendall had two great hobbies, natural history and music, to one or other of which, along with reading, he devoted the whole of his spare time. Those who knew him well feel that they have lost a friend whose place cannot easily be filled, and medicine one who in due time would have contributed work of the highest order. It was characteristic of him that he was "bright and cheerful to the last."

Medical News.

ROYAL COLLEGE OF SURGEONS OF ENGLAND.—The following gentlemen passed their Primary Examinations in Physiology at a meeting of the Board of Examiners on the 9th inst., and when eligible will be admitted to the Pass Examination:—

J. H. Gordon and William Rennie, Birmingham; A. Morton Barford, T. Harcourt Valintine, Arthur W. Hogg, and Henry Nichol, St. Bartholomew's Hospital; George H. Trenfield and A. Dunlop Owen, Bristol Medical School; G. Wilson Pettinger and Harold Birkenhead, Manchester; H. Leonard Hudson, Sheffield School of Medicine; J. A. Eyton-Jones, Liverpool; W. H. Hillyer and Lawrence Franklin, St. George's Hospital; W. H. F. Goodwin, Westminster Hospital; William Mortimer and Fred. J. Oxley, London Hospital; A. Seymour Taylor, Newcastle.

(Candidates referred for three months, 11; six months, 6.)

Passed in Anatomy and Physiology on the 10th inst.:—

Evan Evans, St. Bartholomew's Hospital; William Vost and David T. MacLeod, Glasgow; Edward A. Clarke, Chas. Pearce, and G. Bradley Howe, Manchester; George J. Lough, E. Stewart Leiver, H. Pynter Sloggett, and John Murray, Dublin; Tom. S. Dennison and Charles W. Smeeton, Leeds Schools of Medicine; Frederick J. Fletcher, Birmingham; James Mitchell, Liverpool; Ernest Ward, Bristol School of Medicine.

Passed in Anatomy only:—

A. Ellis Vaughan, Manchester; Charles H. Stevens, University College; M. Hermann, Dublin; Robert S. M. Groves, Birmingham; G. Bridgeford Proctor, Liverpool.

Passed in Physiology only:—

A. G. Nelson Goldney, Charing-cross Hospital; Isaac C. McLearn and Hugh Woods, Dublin.

(Candidates referred for three months, 10; six months, 8.)

Passed in Anatomy and Physiology on the 13th inst.:—

A. R. P. Sanderson, Newcastle-on-Tyne; T. Wilson Smith, W. Sinclair Cameron, and H. Pearson Ainsworth, Guy's Hospital; Andrew P. Lange, King's College; William E. Stevens and Herbert J. Thomas, Bristol School of Medicine; Edgar P. Daniell, University College; R. S. Charsley, Westminster Hospital; T. Gray Carr, Manchester; Nelson C. Sclater, Liverpool; D. McDougall L. Campbell, H. De Vere Stackpoole, St. Mary's Hospital; Arthur B. Bialkie, Cambridge; Tom. W. Bevan, St. Bartholomew's Hospital; W. Bremner Nelson, Middlesex Hospital; Frederick W. Style, London Hospital; G. Brooke French, Edinburgh.

Passed in Anatomy only:—

Neal Nelson, Dublin; Gaston Alexandre, Bâsle; W. D. Wells, King's College; F. B. H. Caudwell, Charing-cross Hospital; Arthur C. A. Lovegrove, Westminster Hospital; Charles Rutherford Adams, St. Thomas's Hospital; W. G. Thorpe, Guy's Hospital; G. Hobson Thompson, St. Bartholomew's Hospital.

Passed in Physiology only:—

D. J. P. McNabb, Newcastle-on-Tyne; T. Jessopp Bokenham, St. Bartholomew's Hospital; T. A. P. Quirk, Melbourne.

(Candidates referred for three months, 11; six months, 10.)

Passed in Anatomy and Physiology on the 14th inst.:—

R. Francis Bate, Charing-cross; E. Stanley Robinson and H. H. Averay Jones, London Hospital; H. B. Marriott and R. G. P. Lansdown, Guy's Hospital; Henry Symonds, St. Bartholomew's Hospital; A. Wilson Boning, C. A. Locke, and P. R. Ponsford, University College; Henry Layng, Westminster Hospital; John Griffiths, King's College; Stanley B. C. De Butts, St. Mary's Hospital.

Passed in Anatomy only:—

G. Elliott Price and Ernest Carter, London Hospital; John More and Matthew H. Vinrace, St. Bartholomew's Hospital; John Harrison, St. Mary's Hospital.

Passed in Physiology only:—

H. Bartlett Shillingford and A. Rowland Jessop, Guy's Hospital; Frank Brightman, University College; H. L. Ebden and G. E. G. Metcalfe, St. Bartholomew's Hospital; Reginald Roberts, Middlesex Hospital; Stacy C. Skipton and Robert W. Logan, St. Thomas's Hospital; F. Alden Nicholas, Westminster Hospital; Charles W. Hopwell, King's College.

(Candidates referred for three months, 14; six months, 10.)

Passed in Anatomy and Physiology on the 15th inst.:—

J. Callaghan Gilmour, W. F. A. Clowes, and Richard T. Temple, Guy's Hospital; E. W. Williams, London Hospital; G. Douglas Kerr, St. Thomas's Hospital; Herbert W. Newton, St. Bartholomew's Hospital; John Rees and Robert Hill, Middlesex Hospital; H. W. G. Green, Westminster Hospital; H. W. Elphick, Charles Wade, S. Sampson Swift, University College; C. H. Duncan, Charing-cross Hospital.

Passed in Anatomy only:—

P. K. O'Brien, University College; R. F. Gordon, St. George's Hospital; George Barton and James Ash, Charing-cross Hospital; F. T. Troughton, Guy's Hospital; C. S. Fisher, St. Bartholomew's Hospital; O. W. Andrews, St. George's Hospital; W. J. Midelton and F. S. Germaine Luiham, St. Bartholomew's Hospital.

Passed in Physiology only:—

A. C. Elliman, Guy's Hospital; E. H. T. Harden, University College; E. J. Cross, St. Thomas's Hospital.

(Candidates referred for three months, 10; six months, 7.)

EXAMINING BOARD IN ENGLAND BY THE ROYAL COLLEGES OF PHYSICIANS AND SURGEONS.—The following gentleman passed the Second Examination in Anatomy and Physiology on the 15th inst.:—

T. Nesbitt Wright, Guy's Hospital.

Passed in Physiology only:—

W. Pechey Smart, Guy's Hospital; W. Louis Abbott, Pennsylvania.

(Candidates referred for three months, 1; for six months, 2.)

The library and museum of the College will be closed on Tuesday, the 21st inst., for the purposes of the Final Examination for the Membership.

UNIVERSITY OF OXFORD.—At a congregation held on the 11th inst., the degree of M.B. was conferred on

Smith, Frederick John, Balliol.

COLLEGE OF PHYSICIANS IN IRELAND.—At the July examinations the undermentioned gentlemen obtained the Licences in Medicine and Midwifery of this College:—

MEDICINE.—Robert Hugh Arthur, Leonard Philip Banks, Louis Albert Frederick Bate, Alfred George Beale, Benjamin Blakemore, Edward Camall, William George Connor, Francis H. Daunt, Julius Barry Delany, John Empson, Henry James Flanagan, James Edward Grant, Michael St. Lawrence Harford, Thomas Walmsley Heywood, David Humphreys, Charles Granville Jackson, James P. James, Charles Trickey Jones, James G. Laing, John Murray Maclean, Timothy Aloysius Mulcahy, William James Neale, Robert Carson Nicholls, Robert Richards, William John Russell, Francis Howard Sinclair, Samuel Henry Steele, Alexander Stewart, Davis D. Tate, Richard Henry Vereker, John Whyte, John Hall Woods.

MIDWIFERY.—Robert H. Arthur, Alfred George Beale, Benjamin Blakemore, Edward Camall, William George Connor, Francis H. Daunt, Julius Barry Delaney, Charles Cochrane Dickson, Henry James Flanagan, Michael St. L. Harford, Thomas Walmsley Heywood, David Humphreys, James Gowans Laing, John Murray MacLean, Timothy Mulcahy, William James Neale, William J. Russell, Francis Howard Sinclair, Norman Smyth, Alexander Stewart, John Whyte, John Hall Woods.

The undermentioned have been admitted Members by examination:—

Charles Edward Fitzgerald. | William Cox Neville.

SOCIETY OF APOTHECARIES.—The following gentlemen passed their examination in the Science and Practice of Medicine, and received certificates to practise, on the 9th inst.:—

Kauffman, Otto Jackson, M.R.C.S., Victoria-park, Manchester.
Luckham, Levi Stevenson, M.R.C.S., Studland, Dorset.
Winship, William Algernon, M.R.C.S., Osborne-terrace, Newcastle-on-Tyne.

On the same day the following gentleman passed his examinaation in the Science and Practice of Medicine, Surgery, and Midwifery, and received a certificate to practise:—

Barrett, Robert Hashy, Elms-road, Dulwich.

MR. MACKIE, the late Member for Wakefield, has bequeathed £1000 to the Clayton Hospital and Wakefield General Dispensary.

NEWS has reached England of the death in West Africa, through the capsizing of a small boat, of Dr. Stephen Paul Engleheart.

ROYAL MEDICAL BENEVOLENT COLLEGE.—We understand that, of fourteen boys from this College who went up to the recent matriculation examination of the London University, eleven were successful.

THE BRITISH ASSOCIATION.—The fifty-fifth annual meeting of this Association is to be held at Aberdeen from September 9th to the 17th, under the presidency of Sir Lyon Playfair.

AT Cardiff, the master of the British ship "Prince Soltykoff" has been prosecuted by the Board of Trade for omitting to enter on the log-book the illness of one of the crew during the voyage.

ON the 15th inst. the Prince of Wales, accompanied by the Princess, opened the Yorkshire College, some particulars of which institution were given in our last issue.

AN International Congress to combat the abuse of alcoholic drinks will, it is announced, be held at Antwerp on September 11th and 12th next, under the presidency of the Burgomaster of Antwerp. Mr. Grattan, British Consul-General at Antwerp, is a member of the committee.

AT the quarterly meeting of the directors of the Naval Medical Supplemental Fund held on the 14th inst., Sir W. R. E. Smart, K.C.B., M.D., Inspector-General, in the chair, the sum of £62 was distributed among the several applicants.

A MOVEMENT was recently set on foot to present Dr. Crichton Browne with a requisition to offer himself as a candidate for the representation of the Universities of Edinburgh and St. Andrews at the forthcoming General Election. Dr. Browne, however, intimated that he would on no account oppose Mr. Macdonald.

THE PIROGOFF MEDICAL SOCIETY.—The Moscow and St. Petersburg Medical Society, founded in memory of Pirogoff, has elected the following as its first office bearers:—President, Professor A. J. Krassowski; Treasurer, Dr. W. Ssutugin; Secretary, Dr. Ebermann. The first general meeting is to be held in St. Petersburg from the 27th to the 30th of December.

AT the annual meeting of the Royal Society for the Prevention of Cruelty to Animals held on the 9th inst., it was stated that during last year 4459 offences of cruelty to animals were proved in courts of summary jurisdiction by the officers of the Society. As usual, the larger number of these convictions related to horses.

A COMPLIMENTARY dinner was given on Tuesday evening last to E. M. Grace, L.R.C.P. Ed., &c., by the Thornbury Cricket Club. It was intended to present Mr. Grace with some substantial mark of the esteem in which he is held by the members of the Club, but the carrying out of this proposal was deferred to another occasion.

HOSPITAL SATURDAY FUND.—On Saturday night a largely-attended public meeting was held at the London Hospital, Whitechapel-road, to promote the interests of this fund.—The Council of the Charing-cross Hospital have unanimously agreed to accept a nominee of the above fund upon their Board of Governors.—The street collection takes place to day (Saturday).

THE CORONERSHIP OF MID-SURREY.—On Saturday last, Mr. A. Braxton Hicks, barrister-at-law, son of Dr. J. Braxton Hicks, F.R.S., was elected without opposition as coroner for Mid-Surrey, in the place of Mr. G. H. Hull, who resigned on account of ill health. Mr. Hicks was deputy to the late coroner, and officiated as deputy coroner for Westminster, West Surrey, and Croydon.

A HOSPITAL FOR CHILDREN WITH CHRONIC DISEASE IN ST. PETERSBURG.—A new children's hospital has just been opened in St. Petersburg. Arrangements have been made for the reception at first of twenty patients. The founder is a member of the Society for establishing Hospitals for Children with Chronic Disease, which numbers at present four hundred members. It possesses a small hospital for sick children in Gatschino.

HASTINGS CONVALESCENT HOME.—A meeting of the governors of the Hastings and St. Leonards and East Sussex Infirmary was held at Hastings on the 14th inst., for the purpose of considering the question of rescinding the resolution which they had passed two years ago, accepting certain premises at St. Michael's as a home for convalescent patients in connexion with the new hospital. Eventually, by a unanimous vote, it was decided that the governors were not in a position to maintain the home, and that, consequently, the premises should be returned to the donors.

THE REGULATION OF ALKALI WORKS.—A report of the proceedings during 1884 under the Alkali, etc., Works Regulation Act has recently been issued to the Local Government Board. The growth of the department may be judged by the fact that twenty years ago the report then issued dealt with the inspection of 85 alkali works. The number of works now registered under the Act of 1881 is 1041, and the number of manufacturing operations is 1420, two or more being in some cases under one certificate of registration. This great increase is due partly to the development of the chemical trades, but mainly to the taking in of several branches of the chemical manufactures by the Act of 1881. The 1041 registered works (this number is an advance of 51 on that of 1883) are classified as follows: alkali 127, sulphuric acid 153, chemical manure 222, gas liquor 16, nitric acid 69, sulphate and muriate of ammonia 247, chlorine 3, salt 111, and cement 93. Only one prosecution took place under the Act during the year. To the general report are appended elaborate local reports from each inspector, containing tables dealing with the statistics of every single work in the several districts.

THE SANITARY INSTITUTE.—At the anniversary meeting of the Sanitary Institute of Great Britain held on the 9th inst. at the Royal Institution, Professor Corfield read a paper on "The Water-supply of Ancient Roman Cities," in which he urged that we should imitate "the great sanitary engineers of antiquity," and obtain drinking-water from unimpeachable sources, instead of using a polluted supply and attempting to purify it for domestic purposes.

INSANITY IN THE UNITED STATES.—Statistics recently issued show that in 1865 the number of insane persons in the United States was only 24,042. Five years later it had reached 37,432, and by 1880 treatment was required for 91,959 lunatics. The proportion of insane appears to be greatest in New England, but the increase has been most rapid in the Western States. In the State of New York there are thirty-five institutions for the care of these unfortunate people, accommodating 11,343 patients, while it is said that there are 4000 provided for at home.

NORTH-WESTERN ASSOCIATION OF MEDICAL OFFICERS OF HEALTH.—At the monthly meeting on the 9th inst., Dr. Welch (Blackpool) read a paper entitled "Some Notes on the Relationship between Scarlet Fever and Diphtheria." He gave particulars of some cases which had come under his observation, showing that apparently scarlet fever had been contracted from persons suffering from diphtheria, and *vice versâ*. Several of the members present joined in the discussion, contributing experiences which seemed to support Dr. Welch's theory that there is direct relationship between the two diseases.

PRESENTATIONS.—At Bridlington on the 10th inst., the members of the Court Victoria Royal, No. 637, of the Ancient Order of Foresters, presented Mr. J. Allison with a handsomely coloured past officer's emblem, as a token of their esteem and appreciation of the courteous and painstaking manner in which he has carried out the duties of surgeon to the Court for the past forty-six years.—Dr. Magrath of Teignmouth, has been presented by his patients and friends with a purse of £200 and an illuminated address on the occasion of his leaving the town, after practising in it for over twenty-six years.

WANDSWORTH AND CLAPHAM WORKHOUSE.—It has been decided by the Wandsworth and Clapham Board of Guardians to turn this building into an infirmary. The present infirmary is now very greatly overcrowded. By converting the workhouse into a hospital some 247 extra beds will be provided, and, in addition, lying-in wards, convalescent wards, and rooms for isolation. The alterations will involve an expenditure of between £50,000 and £60,000. The amount authorised for expenditure on the new workhouse was £64,000. Of this £58,000 has been expended, and the balance will be used for the supply of furniture and fittings.

THE Association for the After-Care of Poor and Friendless Female Convalescents on leaving Asylums for the Insane held its anniversary for 1885 at Bethlem Royal Hospital. There were present, among others, Dr. John Ogle (in the chair), Dr. Savage, Dr. D. Hack Tuke, Dr. Norman Kerr, Dr. Seward, Dr. Fly Smith, Dr. Claye Shaw (hon. treasurer). Several ladies were present. The desirableness of opening a home for mental convalescents was recognised. It was resolved that the result of further efforts should be communicated to an adjourned meeting. Contributions may be forwarded to Dr. Claye Shaw, or to account of After-Care Association, Union Bank, Argyll-place.

SUICIDES IN AUSTRIA.—Several remarkable cases of suicide in Austria are reported. In one instance, a cadet, aged twenty, living in barracks in Vienna, put the muzzle of his gun to his chin, and pulling the trigger, died instantly. Another case is that of an artillery lieutenant at Cattaro, who blew himself to pieces by firing a large cannon against himself in a rather ingenious manner. In a third case a young man and girl jumped into the Danube together. A fourth suicide was that of a sculptor, who hanged himself. At Prague two young lovers, aged respectively sixteen and fifteen, fastened themselves together with a rope and then jumped into the Moldau. At Pesth a fashionable master tailor ended his troubles by hanging himself to a bedpost; while a waitress at Brünn shot herself with a revolver. A son of a rich Vienna merchant, aged twenty-one, and a clerk, also took their lives with revolvers.

ON the 12th inst. a large number of organised bodies of working men in Hackney, Shoreditch, and the surrounding districts united in a church parade for the benefit of the new Metropolitan Free Hospital which is now being erected in the Kingsland-road. At a similar parade last year nearly £200 was collected, the net result, after defraying all expenses, being about £166.

PORTABLE HOSPITAL TENT.—A prize of £200 has been offered by the Empress Augusta for the best portable hospital or sick-room tent for use in war and during epidemics, and will be awarded in connexion with the Antwerp Exhibition, where the competing specimens are now being received, and will remain on show during the rest of the summer.

THE HOUSING OF THE POOR.—The Lord Mayor laid the foundation-stone on Saturday afternoon of an extensive system of improved dwellings for the poor, which the City and Central Dwellings Company have undertaken to erect in the parish of St. Luke, a district which is notable in the recent report of the Royal Commission on the Housing of the Poorer Classes for its terrible overcrowding and insanitary dwelling accommodation. The site occupies an area of 40,800 feet, and it is proposed to erect on about 38,000 feet of this site seven blocks of buildings for artisans' dwellings, the remaining part of the site being utilised for a block of buildings with shops. These new dwellings will afford accommodation for 1400 people.

CAMBRIDGE MEDICAL GRADUATES' CLUB. — The annual meeting and dinner of this Club was held at the Holborn Restaurant on Wednesday evening, the 5th inst. Forty-six graduates were present, including Dr. Dickinson (the chairman), Prof. Humphry, Prof. Latham, Dr. Henry Thompson, Dr. Robert Martin, Dr. C. J. Hare, Mr. Timothy Holmes, and many others connected with the chief medical schools in London. It was decided to hold the next annual dinner at Cambridge. One or two of the speakers in the course of the evening made remarks adverse to the scheme now before the profession for the union of the Royal Colleges of Physicians and Surgeons for the purpose of obtaining the power to grant degrees, and it was proposed as a subject that might well be taken into consideration by the members of the Club.

SOCIETY FOR RELIEF OF WIDOWS AND ORPHANS OF MEDICAL MEN.—A quarterly court of the directors of this Society was held on Wednesday, July 8th, at 8 P.M., the President, Sir James Paget, in the chair. A sum of £1437 was voted for distribution among sixty-six widows, ten orphans, and three orphans on the Copeland Fund. The expenses of the quarter were £39 4s. The treasurer informed the meeting that the grants already made this year exceeded by £308 those of 1884. Fresh applications for relief were received from two widows, and grants were made to them. No new members were elected; the deaths of three were reported, the resignation of another accepted, and four ceased to be members. The directors fear that, owing to the increased demand on the funds, it may not be possible this year to give the usual present at Christmas, unless by gifts and accession of new members the sum necessary (between £400 and £500) be made up.

Medical Appointments.

Intimations for this column must be sent DIRECT *to the Office of* THE LANCET *before 9 o'clock on Thursday Morning at the latest.*

BANCROFT, THOMAS LANE, M.B., C.M.Ed., has been appointed Resident Surgeon to the Hospital for Pacific Highlanders, Geraldtown; also Government Medical Officer at Geraldtown, Queensland.

BARROW, FREDERICK, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer for the Rothbury District of the Rothbury Union.

BARTON, GEO. HENRY, M.R.C.S., L.R.C.P.Ed., has been appointed Medical Officer for the Market Rasen District of the Caistor Union, vice Caistor, deceased.

BROWN, WILLIAM HENRY, M.R.C.S., L.S.A.Lond., has been appointed Health Officer and Public Vaccinator for Rosedale, Victoria.

CHADWICK, GEORGE FREDERICK, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Codford St. Peter District of the Warminster Union, vice Flower.

COLEMAN, GERALD EDWARD, L.R.C.P.Ed., M.R.C.S., has been re-appointed Medical Officer of Health for the Hemsworth Rural Sanitary District.

CURTIS, DENBY T., M.D.Brux., M.R.C.S., L.S.A.Lond., has been appointed Honorary Surgeon to the Bradford Infirmary.

DUTTON, THOMAS, M.D., M.B.Dunelm, M.R.C.P.Ed., has been appointed London Consulting Physician to the Mont Dore Company (Limited), Newton Dale, for five years.

GARDNER, T. FRED, M.R.C.S., L.R.C.P.Lond., L.S.A.Lond., has been appointed Honorary Surgeon to the Bournemouth Cottage Hospital, vice G. M. Hirons, L.R.C.S.Ed., L.R.C.P.Ed., L.S.A.Lond., resigned.

GORNALL, RICHARD GREGORY, M.R.C.S., L.S.A.Lond., has been re-appointed Medical Officer of Health for the Newton Heath Urban Sanitary District.

HENDERSON, COLIN, M.D., C.M.Aber., L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Resident Surgeon to the Bathurst Hospital, New South Wales.

HEWKLEY, FRANK, M.R.C.S., L.S.A.Lond., has been appointed Clinical Assistant to the Royal South London Ophthalmic Hospital, vice H. Davis, resigned.

LUMLEY, BARTHOLOMEW, M.R.C.S., L.S.A.Lond., has been appointed Medical Officer of Health for the Northallerton Urban and Rural Sanitary Districts, vice Richmond, resigned.

MAWBEY, WILLIAM GEORGE, L.R.C.P.Ed., L.R.C.S.Ed., has been appointed Medical Officer for the Blisworth District of the Towcester Union, vice Popplewell, resigned.

O'CALLAGHAN, ROBERT THOS. ALEXANDER, L.R.C.S.I., L.A.H.Dub., has been appointed Surgeon to the County Infirmary, Carlow.

POOSON, W., F.R.C.S., L.R.C.P.Ed., has been reappointed Medical Officer of Health for Leeds Rural Sanitary District.

POLLARD, REGINALD, M.B., M.R.C.S., has been elected House-Surgeon to the Burton-on-Trent Infirmary, vice A. C. Keep, resigned.

ROYLE, J. FREDERICK SHARPE, M.B., C.M.Aber., has been appointed Medical Officer for the Polesworth District of the Atherton Union, vice Hales.

WILLIAMSON, JOHN, M.B., C.M., has been elected House-Surgeon to the Richmond Hospital, Surrey, vice Shaw, resigned.

Births, Marriages, and Deaths.

BIRTHS.

BOSWELL.—On the 10th inst., at Saffron Walden, Essex, the wife of Henry St. George Boswell, M.B., C.M., of a daughter.

CLARK.—On the 11th inst., at Cavendish-place, W., the wife of Andrew Clark, F.R.C.S., of a son.

CLEMENTS.—On the 14th inst., at Gortmoney House, Burton-on-Trent, the wife of W. Clements, M.B., C.M., of a son.

HODGES.—On the 8th inst., at Guildhall-street, Bury St. Edmunds, the wife of James Hodges, M.R.C.S., L.S.A.Lond. (prematurely), of a son.

STEELE-PERKINS.—On the 10th inst., at Coventry-park, Streatham, S.W., the wife of Geo. Steele-Perkins, M.B., C.M.Ed., M.R.C.S.Eng., F.R.C.P.Lond., of a daughter.

TIDBURY.—On the 11th inst., at Elm-park-gardens, South Kensington, the wife of Surgeon J. Tidbury, Army Medical Staff, of a daughter.

MARRIAGES.

COOKSON—ANSTEY.—On the 8th inst., at the parish church of Slapton, Buckinghamshire, Henry Cookson, F.R.C.S., of Woodstock, Eastbourne, to Alice Mary, only surviving daughter of the Rev. H. Anstey, Rector of Slapton.

COWAN—QUICK.—On the 9th inst., at St. Jude's, Southsea, by the Rev. J. S. Blake, M.A., Vicar, assisted by the Rev. H. G. Quick, of St. John's, Clifton (brother of the bride), Richard Hamilton Cowan, M.R.C.S., L.S.A.Lond., of Wigan, to Laura Emmeline, youngest daughter of Thomas Warren Quick, Esq., Southsea, Hants.

GRIFFITH—KINDER.—On the 9th inst., at St. Mary-le-Tower, Ipswich, Walter Spence Anderson Griffith, M.B.Cantab., F.R.C.S., of London, to Minnie, youngest daughter of the late Thomas Kinder, Esq., J.P., of Sandridge, St. Albans.

RUSHWORTH—CUMMING.—On the 7th inst., at St. Sidwell's, Exeter, Frank Rushworth, M.B.Lond., to Jane, fifth daughter of Arthur J. Cumming, Esq., Exeter.

WILLIAMS—WILLIAMS.—On the 29th May, at the City Hall, New York, Albert Williams M.D., of Sydenham, to Barbara B. Williams.

DEATHS.

COOPER.—On the 1st ult., at Jacobabad, Scinde, India, of cholera, Richard Gilpin Cooper, M.R.C.S., Surgeon 2nd Regiment Scinde Horse, youngest son of Bernard Gilpin Cooper, of Southport, aged 27.

ROGERS.—On the 9th ult., suddenly, at Pleasant Valley, in the parish of Manchester, Jamaica, W.I., George Rogers, L.R.C.S.I., L.M., L.A.Dub., for ten years in the Jamaica Medical Service, second son of Robert Rogers, M.D., Enniskillen, Co. Fermanagh, Ireland, aged 42. Deeply regretted by his relations and a large circle of friends.

SMYTH.—On the 10th inst., at Sugden-road, Lavender-hill, Clapham, S.W., John Edward Smyth, M.D., F.R.C.S., aged 67.

WILKIN.—On the 2nd inst., at Leinster-road, county Dublin, Thos. Hy. Wilkin, late Surgeon-Major 4th Battalion Durham Light Infantry, in his 84th year.

N.B.—*A fee of 5s. is charged for the Insertion of Notices of Births Marriages, and Deaths.*

METEOROLOGICAL READINGS.

(Taken daily at 8.30 a.m. by Steward's Instruments.)

THE LANCET OFFICE, July 16th, 1885.

Date.	Barometer reduced to Sea Level and 32° F.	Direction of Wind.	Dry Bulb.	Wet Bulb.	Solar Radia in Vacuo.	Max. Temp. Shade.	Min. Temp	Rain fall.	Remarks at 8.30 A.M.
July 10	30·19	E.	66	60	116	84	57	...	Bright
,, 11	30·09	W.	68	61	120	81	58	...	Bright
,, 12	30·00	S.W.	65	61	99	71	59	·37	Cloudy
,, 13	30·03	W.	59	57	110	73	57	...	Overcast
,, 14	30·21	N.E.	60	53	107	73	53	...	Bright
,, 15	30·23	S.E.	65	57	115	77	54	...	Hazy
,, 16	30·04	W.	64	59	113	71	57	...	Raining

Notes, Short Comments, & Answers to Correspondents.

It is especially requested that early intelligence of local events having a medical interest, or which it is desirable to bring under the notice of the profession, may be sent direct to this Office.

All communications relating to the editorial business of the journal must be addressed "To the Editor."

Lectures, original articles, and reports should be written on one side only of the paper.

Letters, whether intended for publication or private information, must be authenticated by the names and addresses of their writers, not necessarily for publication.

We cannot prescribe, or recommend practitioners.

Local papers containing reports or news-paragraphs should be marked.

Letters relating to the publication, sale, and advertising departments of THE LANCET *to be addressed "To the Publisher."*

TOBACCO AND CHOLERA.

THE Anti-Tobacco Society of France has offered a prize for the best essay bearing upon the question of the liability or otherwise of smokers to contract cholera. As the object of the Society in offering the prize is stated not to be the condemnation of tobacco in the face of facts, but to ascertain the facts as they are, the essays must not be based upon theories, but must be supported by actual occurrences, although the anti-tobacconists would very probably not be displeased to find themselves supported in their hobby by statistics. If a healthy stomach be a safeguard against cholera, it is possible that excessive smoking may dispose to the disease by disordering digestion.

A. R. W.—We would recommend our correspondent to consult the Charities Register and Digest, published by Longmans.

"BOARD SCHOOLS AND MEDICAL CERTIFICATES."

To the Editor of THE LANCET.

SIR,—I can assure "M.D." that he is quite right. The action of School Boards is often very harsh in the matter, and, I believe, tends to pauperism. A child has a cold in the head, or meets with one or other of the numerous slight troubles of childhood, which the mother is quite competent to treat. The school board insists on a certificate. The father naturally resents the fact that he is to be practically fined, say to the extent of half-a-crown, for a doctor's fee, on account of his child's misfortune. He therefore obtains a parish order. The parish doctor's work is thus increased by having to visit the most trivial cases. If he grants a certificate, all goes well until, perhaps, the mother is the next to be ill. Having once become a pauper, it is easy for the man to make up his mind to have her attended for nothing, and eventually he loses all compunction in the matter.

Long ago I saw the unfairness, and refused to grant certificates free, saying that the officials must be content with a verbal message. After some years a complaint was made against me by the School Board to the guardians, and, I understand, one woman stated that three years and a half before she had paid my assistant for a certificate, though she had a parish order. The only case I could recall was that of a private patient. A good deal of "language" was used by the School Board, and eventually the guardians requested their medical officers to give certificates free, though in reference to the matter, and about the same time, a Government inspector said that a similar case had been decided by the Local Government Board against one of these boards. Thus I became an unwilling, unpaid underling of the School Board; but I insisted that proper forms should be supplied to me for signature.

In THE LANCET for Feb. 25th, 1882, "M.D." will find the report of a case tried at the Southwark police-court, in which the School Board was defeated. Mr. Higgins, a certifying surgeon to several factories, there says that he has in his possession a letter from the Education Department, Whitehall, settling the point that School Boards must pay whenever they require certificates.—I am, Sir, yours truly,

July 14th, 1885. A PARISH SURGEON.

MEDICAL MISSIONARIES FOR THE CONGO.

THE untimely death of Dr. Sidney Comber, who went to the Congo a little more than a year ago, and who succumbed lately to remittent fever, has deprived the Baptist Missionary Society of a most able and efficient servant, whose value had also been recognised by Mr. Stanley's party. The Society is, however, by no means paralysed by the calamity, and is prepared to send out other medical men. We hear that a proposal has been submitted to them to increase their medical staff, and in case candidates do not come forward with a view of devoting their lives to the work, the committee is prepared to appoint medical men for a term of three or five years to take charge of their stations. They would have the care of the persons employed at the stations and of the dispensary or hospital. There is ample scope for practice, including large surgery, among the natives, and unlimited opportunities for scientific exploration—botanical, geological, &c. Of course, only gentlemen in hearty sympathy with the missionaries would care for the appointment; but there are probably many young men who would be glad to devote a few years to such a field of practice, and it is impossible to predict what opportunities may open before any who might afterwards desire to remain in the new Free Congo State.

Mr. J. F. Witz.—Probably the best method would be by precipitation with alcohol, and the removal of albuminous matters by acetate of lead.

DUTIES OF MEDICAL OFFICERS OF HEALTH.

To the Editor of THE LANCET.

SIR,—A small stagnant pond, situated among a cluster of houses, has for some time past in this town been a source of danger to health. I, as medical officer of health, reported it to our sanitary committee. This I did many months ago, but owing to a difficulty in finding an owner of the pond, the filling up has till now been postponed. At length a man has been found who admits ownership of half the pond, and is willing to fill up his half; but legal proceedings have to be taken against other parties about whose ownership it is very doubtful, and in which much legal complication is anticipated. I was called upon the other day to lay information against someone of whom I had never heard, as part owner of this pond. This I did; and now our town clerk tells me it is my place to entirely get up the case, to hunt up witnesses and unravel a complicated legal train of circumstances in connexion with said pond. Would you kindly tell me whether, as medical officer of health, I am called upon to perform these duties, which may be strictly termed legal? It appears to me it ought to be the Sanitary Committee of our Corporation *versus* somebody, I only being called in to give my evidence as an officer of the Corporation. In other places I notice, when legal proceedings are taken in cases of nuisances, it is the inspector of nuisances who generally lays the information and carries out the other part of the business.

By giving me your opinion, you will greatly oblige

Yours faithfully,

J. G. BRADEN,

July 10th, 1885. Medical Officer of Health for Lewes.

*** If our correspondent holds his appointment under the Order of the Local Government Board, his duties are limited to those specified in the Instructions which form part of that Order, and he will certainly fail to find anything in them which can be regarded as an instruction to an expert whose duties are medical to "get up" a legal case—"to hunt up witnesses and unravel a complicated legal train of circumstances" in connexion with any case. We need hardly urge that in any matter involving medical considerations a health officer should be ready to aid the authority in preparing a case, such as that mentioned; and it may become necessary for him to do such things as to see witnesses in order to advise how far their evidence may be relied on in support of the contention of the authority. But in taking such steps he ought only to act as a medical adviser, and should not be a principal in preparing the case. If our correspondent is not appointed under the Order referred to, then his duties depend entirely upon what he has undertaken to do.—ED. L.

MAY THE OFFICES OF CORONER AND MAGISTRATE BE HELD BY THE SAME PERSON?

Medicus.—We know of no legal enactment by virtue of which a coroner is prevented from being appointed to the county magistracy; but inasmuch as he would be called upon to discharge in one court the functions of president and in another those of judge and jury, we consider the combination of offices to be undesirable. It would be next to impossible for him to divest himself of prejudice in favour of or against an accused person if he had previously become possessed of evidence in the case. Theoretically the presumption is, that a man is innocent until he is proved guilty, and in order that this precept should remain free from discredit it is necessary for those on whom the decision is cast to enter upon their duties without that unconscious bias which a foreknowledge of the facts would tend to create.

Mr. W. Bruce should be guided by the advice of his medical attendant. We do not prescribe.

FLOWERS FOR HOSPITALS AND WORKHOUSE INFIRMARIES.

AN appeal has been made by the Kyrle Society which, in this glorious summer weather, has surely only to be read to ensure a liberal response. We ourselves have pleaded this same cause so recently as last month; but having regard to the statement, that "there are still forty-seven hospitals, twenty-three workhouses, and twelve workhouse infirmaries which are wholly unsupplied with flowers, and where they will be 'only too thankfully received,'" we willingly return to the charge, and reiterate our opinion of the value of wholesome flowers and other such sweet surroundings to the sick and suffering. We commend to the attention of ministers of all denominations the pretty custom that obtains at some churches of holding a "flower service." If this plan were more extensively and more frequently followed, a better supply of flowers might be forthcoming for the hospitals. Large numbers of people, too, come up to their daily work in London by train from the country. Many of these would, we are sure, gladly bring with them from their gardens a few flowers for the hospitals; and there would be no great difficulty in establishing a system of daily collection at the principal London termini.

Mr. C. F. Goode.—The question is not very clearly put; but the minutes should be confirmed before the transaction can be considered closed.

House-Surgeon.—Parkes and Wilson.

MEDICAL ETIQUETTE.

To the Editor of THE LANCET.

SIR,—In your comments, in THE LANCET of July 4th, upon the question in dispute between Mr. Pinder and myself, it would appear to those unacquainted with the facts that I had made a post-mortem examination on the body of a former patient of Mr. Pinder without having first communicated with him, and that I had done so knowing that it was a younger member of the family who was making arrangements with me, while a senior member had previously arranged with Mr. Pinder to make the examination. As this does not accurately represent the position I held, I shall be much obliged if you can find space for the following statement of facts.

On Thursday, June 18th, Mr. J. R——, a gentleman unknown to me, apparently about twenty-four years of age, requested me to make a post-mortem examination on the body of his mother, whom I learnt had died from what was believed to be malignant disease, and for the sake of the surviving relatives the family wished to know if that were so. I told him I could not do so without first communicating with the usual medical attendant. He asked me when I could make the post-mortem examination, and I gave him two times for the following day, since they wished to hold the funeral the next day but one. He asked me to allow the matter to stand over until the evening, when he would have it definitely fixed. About eleven o'clock the same evening he sent a letter to me by a younger brother, in which he stated that Mr. Pinder, their usual medical attendant, "has taken umbrage at our suggestion of an independent post-mortem, and practically declines to meet you. Will you, under these circumstances, undertake the operation yourself solely? 8.30 A.M. will suit best." He also sent me Mr. Pinder's letter, in which that gentleman said: "You are perfectly at liberty to ask Mr. Harris to make the post-mortem, and he can please himself at what hour and on what day he chooses to do so, as it is a matter of the most perfect indifference to me, as I decline to have anything further to do in the matter. I do not know whether you are aware that you have offered me the very greatest insult that lies in your power." Even after receiving this I told the brother that I should write to Mr. Pinder and tell him the time I proposed to make the examination. That I did, fixing nine o'clock the next morning, and apologised for not being able to give him a longer notice. At the time fixed I went to make the examination, and for the first time learnt that there was an elder brother, Mr. E. R——, who said, as Mr. Pinder had not come, he would go and ask him to so, and further explain matters. This he did, and, as I understood, Mr. Pinder still refused to come. What I would particularly call your attention to is, that I did not know that Mr. Pinder had been requested to make the post-mortem examination until he himself told me of it in the course of our correspondence, and that I did not know until after I had communicated with Mr. Pinder that an elder brother existed; and lastly, I must mention that Mr. J. R—— was not a minor.

I regret exceedingly that there should have been any apparent want of courtesy on my part to Mr. Pinder, for nothing could have been further from my intention.—I am, Sir, yours truly,

THOS. HARRIS,
July 13th, 1885. Pathologist to the Manchester Royal Infirmary.

A CHROMATIC DIAGNOSIS OF LEPROSY.

IN the purchase of slaves in China, says the *New York Medical Record*, great care is taken to see that they are perfectly sound, and especially that they are free from the taint of leprosy. For this reason they are usually taken on trial for a month. In examining for leprosy the slave is taken into a dark room, and a blue flame is then passed before the face. If the skin assume a greenish hue the intending purchaser is satisfied, but if there be a red reflection from the face the presence of the dread disease is suspected, and the slave is returned.

Mr. J. G. Stuart is thanked.

Mr. J. S. Salt.—Mr. J. Heywood, Deansgate, Manchester.

MONORCHIDS.

A. H.—The question as to the possible or probable inconvenience to which monorchids are liable falls under two heads (1) With regard to sexual capacity, there can be no doubt that the particular infirmity never of itself leads to impotency. *Apropos* this matter, Casper remarks: "Duality of testicle is a luxury of nature." (2) Concerning the chances of induced disease, we may state generally that when the organ is entirely retained within the abdomen, less serious evil is to be anticipated than when it occupies the inguinal canal; for in the latter case it predisposes to the development of *hernia*, and is a serious obstacle to the successful treatment of that affection. Again, the partially undescended organ is subject to injury both by contraction of the abdominal muscles and by direct violence. We know of one case in which within a month of marriage a gentleman died from pyæmia following suppuration of the testis consequent on such pressure as above mentioned being exerted upon the gland, swollen from the increased vascularity incidental to the sexual orgasm. It is exceedingly problematical that non-descent of the testicle *per se* is the cause of "an overpowering sensual appetite," or that it leads to mental disorder. We can understand that a man of unevenly balanced mind may, by dwelling on his imperfect development, become afflicted with fixed ideas of impotency and its attendant distressing forecasts, and thus indirectly his "being born with one testicle" may be the means of permanent derangement of the moral sense, or, more remotely, of intellectual insanity. In the majority of instances, however, there need be no apprehension of mental or bodily derangement.

C. S. J.—We do not see the proposal of our correspondent in the same light as he does. A pay hospital promoted and advertised by a medical man would be open to very grave objections. Even in London, where such institutions are promoted by associations, they are open to criticism. But in the case supposed by our correspondent they would be much more so. We should advise him to act in concert with other medical practitioners, and to leave the commercial parts of the undertaking to business men.

F.R.C.S.—The Report of the Select Committee, 1881 and 1882; the Minority Report; Speech of the Right Hon. G. Osborne Morgan, Q.C., M.P., April 20th, 1883; our articles in May and June, 1883.

Mr. O. A. Wickham may consult our advertising columns, or the Charities Register and Digest, published by Longmans, for the information he desires.

MORTALITY IN CHILDBIRTH.

A CORRESPONDENT sends a cutting from a paper devoted to the interests of the fair sex, in which it is stated that "in fifteen years the patients of the Royal Maternity Charity died in the proportion of one in every 554 cases. During the same period the deaths in the population of mothers, mostly, of course, attended by medical men, were one in every 344. Thus, the poor women under the care of the midwives died in considerably less numbers than those attended by male practitioners." This statement conveys a very erroneous impression. The editor of the journal in question is doubtless not aware that the midwives attached to the Royal Maternity Charity are compelled to send for the district surgeon of the charity in all cases of difficulty, and, being experienced women, they send *in time*. In general practice one finds untrained ignorant women acting the part of accoucheur, and nearly always keeping their patient so long before acknowledging they must have medical aid that she is in grave danger before the medical man arrives. We reported a case in point in our issue of the 11th inst., and in our remarks upon it showed that the remedy for such a pitiable state of affairs rested with the Government. The evil is a serious one, and its removal should not be delayed.

A Surgeon.—The question is purely a legal one. As it was not settled by contract, it ought to be settled by conciliation. The fair way would apparently be to divide the money in question. It ought to be arranged between the partners, without reference to the secretaries of the club.

Mr. N. K. Dutt.—If an assistant engages himself to his principal for a fixed compensation without contingencies, he cannot expect that exception should be made with respect to the fees derived from services rendered in a coroner's court. We do not know of any custom at variance with the above statement.

HOSPITAL FOR CASTE WOMEN IN MADRAS.

IN a leading article on this subject in our issue for May 16th it was stated that the original conception of such a building was due to Surgeon-General Cornish. A correspondent, however, writes to inform us that the idea of a hospital for caste and Gosha women is due primarily to Mesdames Keess, Firth, and Scharlieb; that it became a fact, to Her Excellency Mrs. Grant-Duff and Mr. Forster Webster.

Mr. W. E. Stevens.—To the Registrar of the General Medical Council 299, Oxford-street.

COMMUNICATIONS, LETTERS, &c., have been received from—Dr. W. R. Huggard, Geneva; Surgeon-General Crane, Trinidad; Dr. J. K. Barton, Dublin; Sir H. Thompson; Dr. Samuel West, London; Mr. W. Mathews, Bristol; Mr. R. Macpherson, Glasgow; Mr. J. G. Stuart, Edinburgh; Mr. Blackmore, Manchester; Rev. H. Hawkins, Colney Hatch; Dr. Charles Denison, Denver; Mr. Jas. Startin, London; Mr. Farrington, Diss; Mr. J. B. James; Mr. J. N. Vogan, London; Mr. J. Oliver; Mr. Barlow, Birmingham; Miss Le Ferriere, London; Mr. Elliott, Gerolton, Australia; Mr. Seltman; Mr. Sell, London; Mrs. Jaffary, Birmingham; Mr. Tunmer; Mrs. Rawlins, Westgate-on-Sea; Messrs. Smith and Son, Dublin; Mr. Browne, Douglas; Dr. Braund, Stratford; Mr. Harrison, Derby; Dr. Adams, West Malling; Messrs. Macmillan and Co., Cambridge; Mr. Fairbank, Windsor; Messrs. Boulton and Paul, Norwich; Miss Cuthbert; Mr. R. Parker, London; Dr. Davies, Bridgend; Mr. Witz, Scarboro'; Dr. R. Fowler, London; Dr. Herbert Tibbits, London; Mr. R. C. Bennett, Trinidad; Mr. Beall, Bognor; Mr. Braden, Lewes; Dr. Percival Hunt, London; Mr. Younan, Calcutta; Mr. Vose Solomon, Birmingham; Dr. T. Laffan, Cashel; Dr. Prosser James, London; Dr. E. Diver, Kenley; Mr. Richard Davy, London; Dr. Pearson, Cape Colony; Dr. Woakes, London; Dr. Caspar, Berlin; Dr. Murray, Claremont, S. Africa; Dr. Burns, London; Mr. Warman, Ramsgate; Mr. Wetwan; Mr. Blumer, Stafford; Mr. Goss, Boro'; Messrs. Beck and Co., Cornhill; Mr. Davis, Churchingford; Messrs. Mackay, Edinburgh; Mr. Thompson; Mr. Bond, Leamington; Mr. Wheeler, Ilfracombe; Mrs. Stretton, Hounslow; Mr. Hinkson, Birmingham; Mr. M. Monckton, Marden; Mr. J. H. Morgan, London; Dr. W. J. Collins, London; Mr. C. F. Jeaffreson, Newcastle-on-Tyne; Dr. Robertson, Kimberley; Dr. Johnson Martin, Bolton; Mr. C. Cowen, Port Elizabeth; Mr. Blackett, London; Dr. Steavenson, London; Mr. T. Harris, Manchester; Dr. Wiltshire, London; Dr. Thompson, Kensington; Dr. Gledhill, Manchester; Mr. Taylor, London; Mr. Parker, London; Messrs. Hamlin and Co., Wood-green; Messrs. Newbery and Son, London; Mr. Jupp, London; Messrs. Macmillan and Co., London; Messrs. Allen and Hanbury, London; Messrs. Lee and Martin, Liverpool; Mr. Philips, London; Messrs. Harrison and Brass; Mr. Anderson, Kirkwall; Messrs. Hodges, Rhyde; Mr. S. Miller, Windsor; P. P.; J. A.; A Medical Elector; An Elector; A Parish Surgeon; W., Dalston; G.A.C., Glasgow; B.; L.R.C.P. & S. Ed.; L., London.

LETTERS, *each with enclosure*, are also acknowledged from—Mr. Court; Mr. Wilson, Wandsworth; Mr. Pleuning, Partingear; Dr. Parkis, Perth; Dr. Davies, Stoke-on-Trent; Mr. Fort, Oldham; Mr. Foulford, Okehampton; Mr. Bennett, Trinidad; Mr. Christopher, Rotherham; Dr. Robinson, Dunscar; Mr. Man, Bradford; Mr. Hickson, Nottingham; Mr. Harrison, Derby; Mr. Rogers, Brixton; Mr. Davies, Birmingham; Dr. Branthwaite; Mr. Holtby, York; Mr. Whiteley, Halifax; Mr. Holden; Mr. Buckle; Mr. Watson, Scarboro'; Dr. Cox; Mr. Johnson, Wrexham; Dr. Heelas, Bonchurch; Messrs. Rigley and Sons, Rochdale; Miss Goodban, Netley; Mr. Hodgson, Macclesfield; Mr. Brown, Tredegar; Mr. Gant, London; Mr. Brocklebank, Islington; Dr. Watson, Penistone; Mr. Thornton, Huddersfield; Messrs. Richards and Co., London; Mr. Mason, Windsor; Mr. Cowan, London; Dr. Clements, Burton-on-Trent; Dr. Leckie, Pontypridd; Medicus, Blundell Sands; A. B.; Alpha; The Matron, Lincoln Hospital; M.D., Weston-super-Mare; M.D., London; Medicus, Manchester; Doctor, Bristol; Medico; J. M., Whitby; Surgeon; Alpha, Clapham; Forceps, Edinburgh; Surgeon, York; J. M. J.; F. M., Edinburgh; E. C.; P. A.; H. M. P., Ripon; B. B., Skipton; G. M., Bristol; M.D., Camden-town; A., Strand; L.C., M.R.C.S.; Medicus, Peckham Rye; R. L. H., Burwash; Miss B., Edinburgh; Medicus, Walthamstow; E. M.; A. J., Stoke-on-Trent; T. W., London; Surgeon, Eastbourne; Medicus, Edinburgh;

Newcastle Daily Chronicle, New York Financier, Western Morning News, Church of England Temperance Chronicle, Bridlington and Quay Gazette, Edinburgh Courant, Manchester Guardian, Kimberley Diamond Fields Advertiser, Lincolnshire Chronicle, &c., have been received.

Medical Diary for the ensuing Week.

Monday, July 20.

ROYAL LONDON OPHTHALMIC HOSPITAL, MOORFIELDS.—Operations, 10.30 A.M., and each day at the same hour.

ROYAL WESTMINSTER OPHTHALMIC HOSPITAL.—Operations, 1.30 P.M., and each day at the same hour.

ST. MARK'S HOSPITAL.—Operations, 2 P.M., and on Tuesdays at the same hour.

HOSPITAL FOR WOMEN, SOHO-SQUARE.—Operations, 2 P.M., and on Thursday at the same hour.

METROPOLITAN FREE HOSPITAL.—Operations, 2 P.M.

ROYAL ORTHOPÆDIC HOSPITAL.—Operations, 2 P.M.

Tuesday, July 21.

GUY'S HOSPITAL.—Operations, 1.30 P.M., and on Friday at the same hour. Ophthalmic Operations on Mondays at 1.30 and Thursdays at 2 P.M.

ST. THOMAS'S HOSPITAL.—Ophthalmic Operations, 4 P.M.; Friday, 2 P.M.

CANCER HOSPITAL, BROMPTON.—Operations, 2.30 P.M.; Saturday, 2.30 P.M.

WESTMINSTER HOSPITAL.—Operations, 2 P.M.

WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

CENTRAL LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M., and on Friday at the same hour.

Wednesday, July 22.

NATIONAL ORTHOPÆDIC HOSPITAL.—Operations, 10 A.M.

MIDDLESEX HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.—Ophthalmic Operations on Tuesdays and Thursdays at 1.30 P.M.

ST. MARY'S HOSPITAL.—Operations, 1.30 P.M. Skin Department: 9.30 A.M., on Tuesdays and Fridays.

ST. THOMAS'S HOSPITAL.—Operations, 1.30 P.M., and on Saturday at the same hour.

LONDON HOSPITAL.—Operations, 2 P.M., and on Thursday and Saturday at the same hour.

GREAT NORTHERN CENTRAL HOSPITAL.—Operations, 2 P.M.

SAMARITAN FREE HOSPITAL FOR WOMEN AND CHILDREN.—Operations, 2.30 P.M.

UNIVERSITY COLLEGE HOSPITAL.—Operations, 2 P.M.; Saturday, 2 P.M. Skin Department: 1.45 P.M.; Saturday, 9.15 A.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 3 to 4 P.M.

Thursday, July 23.

ST. GEORGE'S HOSPITAL.—Operations, 1 P.M.

ST. BARTHOLOMEW'S HOSPITAL.—Surgical Consultations, 1.30 P.M.

CHARING-CROSS HOSPITAL.—Operations, 2 P.M.

NORTH-WEST LONDON HOSPITAL.—Operations, 2.30 P.M.

Friday, July 24.

ST. GEORGE'S HOSPITAL.—Ophthalmic Operations, 1.30 P.M.

ROYAL SOUTH LONDON OPHTHALMIC HOSPITAL.—Operations, 2 P.M.

KING'S COLLEGE HOSPITAL.—Operations, 2 P.M.

Saturday, July 25.

KING'S COLLEGE HOSPITAL.—Operations, 1 P.M.

ROYAL FREE HOSPITAL.—Operations, 2 P.M.

MIDDLESEX HOSPITAL.—Operations, 2 P.M.

SUBSCRIPTION.

POST FREE TO ANY PART OF THE UNITED KINGDOM.

One Year	£1 12 6	Six Months	£0 16 3
To CHINA AND INDIA	One Year		1 16 10
To THE CONTINENT, COLONIES, AND UNITED STATES	Ditto		1 14 8

Post Office Orders should be addressed to JOHN CROFT, THE LANCET Office, 423, Strand, London, and made payable at the Post Office, Charing-cross.

Notices of Births, Marriages, and Deaths are charged five shillings.

Cheques to be crossed "London and Westminster Bank."

ADVERTISING.

Books and Publications (seven lines and under)	£0 5 0
Official and General Announcements	0 5 0
Trade and Miscellaneous Advertisements	0 4 6
Every additional Line	0 0 6
Front Page per Line	0 1 0
Quarter Page	1 10 0
Half a Page	2 15 0
An entire Page	5 5 0

The Publisher cannot hold himself responsible for the return of testimonials, &c., sent to the office in reply to advertisements; copies only should be forwarded.

NOTICE.—Advertisers are requested to observe that it is contrary to the Postal Regulations to receive at Post-offices letters addressed to initials only.

An original and novel feature of "THE LANCET General Advertiser" is a special Index to Advertisements on page 2, which not only affords a ready means of finding any notice, but is in itself an *additional* advertisement.

Advertisements (to ensure insertion the same week) should be delivered at the Office not later than Wednesday, accompanied by a remittance.

Answers are now received at this Office, by special arrangement, to Advertisements appearing in THE LANCET.

Terms for Serial Insertions may be obtained of the Publisher, to whom all letters relating to Advertisements or Subscriptions should be addressed.

Advertisements are now received at all Messrs. W. H. Smith and Son's Railway Bookstalls throughout the United Kingdom, and all other Advertising Agents.

Tables of Contents, with the Index of Advertisements, for each Number can be had on application to the Publisher.

Agent for the Advertising Department in France—J. ASTIER, 66, Rue Caumartin, Paris.